Cucamonga Vineyard Co., et al., Plaintiff.

In the Superior Court

OF THE

COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA.

DEPARTMENT ONE

Cucamonga Vineyard Co. et al.,

Plaintiff

vs.

San Antonio Water Co.,

Defendant

No. 9187.

Vol. II.

HON. FRANK F. OSTER, Judge.

I. BENJAMIN, Official Reporter.

COUNSEL APPEARING:

For Plaintiff

For Defendant

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I. BENJAMIN, Official Reporter

May 24th, 1907. Eighth Day.

F. E. TRASK.

DIRECT EXAMINATION (Resumed)

Mr. Bitt, Q Using this map to which your attention was directed yesterday afternoon at the time of adjournment, I will ask you to state the length of that main coming down from the San Antonio Canyon, proceeding, I think, from a certain division dam, using the scale and giving approximately as you have given the length of the mains from the Sixteenth Street wells and from the mouth of the Eacy tunnel, to the place of first connection with some of the distributing pipes of the San Antonio Water Company.

Mr. CHAPMAN: When you get to the division dam will you give us the distance from the point of diversion from the stream to the division dam, and the rest of it then on down?

A At the present time the division dam receives the water from the Power House through pipe lines at that period of each year when flood waters are not passing down the canyon. This is by virtue of the installation of a power plant near the division dam, the supply pipe line of which power plant being a cement conduit and taking the water from the San Antonio Vanyon at a point near the north line of section 1, township 1 north, range 8 west; and the locus of the divide dam or division dam, as it is sometimes called, is the same now as it has been ever since my first knowledge of the canyon which was in the year 1887.

Q You are speaking of the canyon of the San Antonio Creek?

A Yes, sir. At the divide dam the water is diverted into a ditch. This ditch has a length southerly about 1800 feet

to a sand box and screen box, and from this sand box the water is carried through a pipe line in a southerly direction for about 3300 or 3400 feet to the intersection with the ditch line, which is the terminus of the San Antonio tunnel, and carries the San Antonio tunnel water southeasterly, and at the point of intersection the tunnel water and the creek water are mingled. At or near the point where the creek and tunnel waters mingle and extending from 3000 to 32000 feet southeasterly around the foot hill the water is conveyed in a cement conduit elliptical in cross section and having a width of 3 feet and a depth of 4 feet, to a point in section 24, township 1 north, range 8 west, and marked on the map as "Box". This box and conduit convey the water or deliver it to a pressure pipe line 22 inches in diameter and about 1800 feet in length through which the water is carried to a power plant located in the southeasterly corner of block 20, of the San Antonio Heights tratt.

Q Whose propery is that power plant, if you know?

A I think it is part of the property of the San Antonio Heights Electric Railway Company.

Q Proceed.

A Supplementing this pressure pipe line there is a vitrified line laid parallel between the box and the head of the pressure line and the power plant, used as an overflow or surplus line, delivering waters to the power plant. From the power plant southeasterly some thousand or 1100 feet the water is carried through parallel lines, one an 18 inch cement and the other an 18 inch vitrified pipe to a division box. From this division box radiates 4 distributing pipe

lines carrying the waters easterly and southerly into the distributing system of the Ontario Colony lands. I will remark here that at a point northwesterly from the junction of the canyon and thentunnel waters there is a short pipe line delivering water from a ditch known as the tunnel ditch, southerly to some lots that are improved in that vicinity.

Q Was water to any considerable amount taken from that ditch?

A I don't know the amount that is taken from that point in the ditch. And also, at the point just southeast of the punction of the creek and those waters, there is another pipe line running south along the dividing line between the Colony lots, into which water is diverted for the irrigation of lands lying along that pipe line, and soth of the point of intersection.

Q The total distance from the division dam down to this measureing box where, as I understand you, there is a distribution of water into some 4 pipe lines, is how much altogether?

A I had given it in partial distances, the sum of which would represent the total distance or approximately the total distance.

Q All right. We can get that easy enough. The quantity of water which is called by Mr. Leeke in his testimony the Gird water, comes from what source?

A The Gird water comes from the San Antonio Canyon and is a prior right on the canyon supply.

Q Does that come down through the same series of conduits you have just been describing?

A It is measured out above the division of the waters between the Ontario and Pomona people, and later is mingled with the water and in the ditches and pipes which I have described.

Q And carried down to the distribution box?

A It is mingled with the other waters.

Q The Bodenhammer - or Bodenhammer tunnel, which is that situated?

A As I said yesterday, it is on or near the center of section 36, township 1 north, range 8 west, running north and south.

Q What distance is the water from that tunnel carried from that tunnel to be mingled with the water in the distributing system of the San Antonio Water Company?

A That tunnel is dry now as I understand it.

Q Does not produce any water?

A No.

Q Now recurring to this pipe line from the Sixteenth Street wells carrying the water westerly into the Ontario Colony lands, you stated yesterday that the point of first intersection of any distributing pipes or mains of the San Antonio Water Company is, I think a place between lots 450 and 451 designated on this map?

A So far as I know; it was when I laid the pipe line.

Q Now is there any other pipe supplied from that main brought from the Sixteenth Street wells until, or before rather, Euclid Avenue is reached, the Street in the Ontario Colony lands called Euclid Avenue?

A Yes, sir; there are 2 north and south laterals inter-

secting that main, one of them one ten east of Euclid Avenue and the other two tens east of Euclid Avenue.

Q When you use the word ten you mean ten acre tracts?

A I refer to the subdivisions of the Ontario Colony lands; those lots, being ten acres each, I call tens.

Q Are you able to say what proportion of the water from the Sixteenth Street wells, those wells north of the Base Line, including the Eskell well, what proportion of the water is emptied into the distributing system of the San Antonio Water Company, east of Euclid Avenue?

A I have nomknowledge of the proportioning of that water to the different stockholders.

Q Are you able to say whether a majority of the water, a largrr portion of it, is carried over and consumed east of Euclid Avenue, or some less amount?

A It would be nothing but a guess on my part; I know nothing of the distribution.

Mr. Britt: I think that is all.

Mr. Chapman: We do not care to ask any questions.

-o-

FREDERDCK H. REED.

Frederick H. Reed, a witness previously sworn, being recalled by plaintiffs, testified as follows:

Diredtt Examination.

Mr. Britt, Q The other day when you were called, I think on cross examination by Judge Chapman, you said something about being employed to make these measurements which you gave this testimony about, by the Cucamonga Water Company: Do you know anything about whether it was the Cucamonga Water

Company or some other company?

A I believe it was the Cucamonga Vineyard Company.

Q From whom did you get your pay?

A I got my pay from the Cucamonga Vineyard Company.

Q Well, now, I want to call your attention to this chart again, the diagram on the board, plaintiff's Exhibit 3. You notice that the right hand side of the chart contains the caption at the head "San Antonio Company's wells"?

A Yes, sir.

Q And under that division into columns, "number 1", "Number 2" and so on to number 8, and then the next is number 14. You notice also a column to the right of the column headed number 14, with the heading "Cement shaft"?

A Yes, sir.

Q And then next to that is the "West Hellman Well"; and next to that still proceeding toward the right is "West side well number 2." Are you acquainted with the locality of those several objects which are mentioned in those columns?

A Yes, sir.

Q At the head of those columns, I should say?

A Yes, sir.

Q Can you point out on this map, plaintiff's Exhibit 1, about the locality of the San Antonio Well number 1?

A That is about the position of number 1 well, in reference to the map here. It is the westernmost well of the series.

Q Of the San Antonio Company's wells?

A yes, sir. They come in that order, 2, 3, 4, 5, and 6,

which is the Rubio well, I believe, so-called; that is my understanding of it at least.

Q And the Haskell well?

A The Haskell well I noted as well No. 3 in my notes, the Haskell well number 2; it would be the number 8 noted here.

Q Oh, Oh, well, in your notes yes, but in this tabulation here, the Haskell well is how designated, on this plaintiffs' exhibit 3?

A As number 8.

Q And the number 14 of that tabulation, plaintiff's Exhibit 3 is situated where on this map Plaintiffs' Exhibit 1?

A I don't know of a number 14.

Q Well, did you make measurements or any observations on the well at the head of the Eady tunnel, the long tunnel, tunnel number 2?

A Which well do you refer to?

Q I refer to this well up here at the head of that tunnel. I don't know whether you did or not. Was there any cement shaft over there at which you did make measurements?

A Yes, sir; the cement shaft on the Eady tunnel, or this tunnel number 2, which was called number 3 weir; at that I made a measurement whenever I could.

Q Marked "Cement shaft"?

A Yes, sir.

Q I see you made no measurements on well No. 14. The column is blank.

A Yes. The cement shaft I made measurements on as shown here.

Q Now under the column or rather in the column, the second

one from the extreme right is the faption "West side well number 2": Where is that west side well number 2?

A That is at this point marked here artesian well number 2. That is the way I knew it and reported it on the notes, well number 2.

Q That is near the north boundary of the 90 acre tract on this plaintiffs' Exhibit 1?

A Yes, sir.

Q And then the last - There is one I omitted to call your attention to, the west Hellman well: Where is that situated on plaintiffs' exhibit 1?

A At this point here in the northern part of the tract in section 4, apparently at the upper end of this tunnel line, Y.

Q The Y tunnel?

A Yes, sir; as shown here.

Q At the extremity of the westerly branch of the Y tunnel?

A Yes, sir; two or three hundred feet south of the Base Line, the well is situated, on the ground.

Q I call your attention to this plaintiffs' Exhibit 3, and in the column for date, year 1904, July 27th; I see that under the column of name of observer appears the name F.H. Reed.

A That represents my measurement. F.H. Reed represents as shown here my measurements on these dates following July 27th.

Q State whether or not you began to make measurements at that time of the water flowing at the several weirs and the water from the several wells and the elevation of water in

that Hellman well, and the elevation of water in that artesian well number 2 on that date?

A Yes, sir; commencing on that date.

Q Have you examined this particularly, this diagram plaintiffs' exhibit 3?

A Yes, sir; I have gone over all the entries in it since my last examination here, with a view to determining wheter it coincided with my original notes.

Q You at the time made these various measurements did you?

A I made notes and kept a record of the measuements as I made them and each of these points you mentioned.

Q Now state whether the result of those measurements has been correctly transcribed on to this diagram or chart, plaintiffs' exhibit 3?

A It has practically. I found some trifling differences from my measurements that I have ignored, to the extent of within half an inch, as shown here, these quantities being shown in miners' inches; my report showed them in cubic feet per second; and the difference here, except where I have made the corrections to agree, there is no difference from the date July 27th; I am not referring to this above but from that on where I have taken the measurements; there is no difference in this exhibit from my memoranda within one half an inch.

Q Now then, somewhat more particularly again in relation to this chart or diagram: the first column under the head "name of observer", wherever your name T.H. Deed appears, indicates what?

A Indicates that I made the measurement solely.

Q And where your name appears in connection with that of

somebody else, what does that indicate?

A It indicates that they were present at the measuring, or made the measurements with me; that is they made measurements also, each making independent measurements.

Q Then where the ditto marks or the double commas appear there underneath your name, or under neath your name with other parties, they indicate what?

A They indicate a repetition of that name.

Q A repetition of the observer or observers?

A Yes, sir.

Q Now, under the column headed date, what do those figures indicate?

A That column indicates the date of the observation.

Q And the figures in the first column, weir number 1, indicate what?

A Indicate the amount of water flowing over the weir in miners' inches.

Q Measured under a four inch pressure?

A Well, taken on the basis of an inch of water being the fiftieth part of a cubic foot.

Q One fiftieth of a cubic foot flow per second?

A Yes, sir.

Q That is true of all the measurements on this chart?

A Yes, sir; that is so.

Q The figures under the column headed weir number 2 show what?

A They show likewise the amount of cubic feet per second for that weir.

Q In cubic feet per second?

A In miners' inches, in this exhibit. I would say that all the quantities in the different columns of the weirs are a record of miners' inches flow over the weirs for the dates given.

Q You explained in part about these several weirs on the left hand side of this tabulation, and I will ask you merely about that weir 8, the column under the weir number 8; where were those measurements made?

A This is the point here. It is a division box. I was told it was called also the Creek Division Box; it is the termination of the 30 inch pipe line leading the water from the canyon, immediately west.

Q When you speak of the canyon what do you mean?

A The arroyo or depression or creek.

Q Cucamonga Creek?

A Yes, sir.

Q And down to a point, with reference to the Mountain View Hotel?

A Well, it is south of the Mountain View Hotel, perhaps 150 feet, and alongside a road leading from the county road to the hotel, on the westerly side of the driveway.

Q Now these columns on the right hand side of the exhibit, under the general caption San Antonio Company's wells, commencing with number 1, those figures in the column headed number 1, show what?

A They show the amount of water in inches flowing at number 1 weir, San Antonio Company's wells, at the time measured in this record.

Q Was that weir number 1 correspond with the well number 1?

A It corresponds with the well number 1, the weir being at the well number 1. The well number 5, the weir is situated some distance south of the well, water being conveyed in a pipe to the weir.

Q As to all those wells, numbers 1, 2, 3, 4, 5, 6, 7, 8, San Antonio Company's wells, the figures in the columns having those headings respectively, mean what in the course of your observations?

A They mean the quantity of miners inches flowing at the time the measurements were made, as shown in this column to the left opposite this entry.

Q As ascertained by yourself?

A Or with others as shown here.

Q How was that water obtained from the well? How did you have the opportunity to measure it? Were the wells being pumped at the time?

A The wells were being pumped. In case of the San Antonio Company's wells there would be no opportunity to measure at the weirs unless the pumps were running.

Q Now, you continued those measurements, referring to this diagram to refresh your recollection, until what time?

A Until the 4th day of June, the 3rd or 4th day of June, 1906.

Q A period then of near 2 years?

A Yes, sir; 22 months about.

Q Now, then in the year 1904 the first observation that you made on the flow of the San Antonio Company's wells was of what date?

A July 27th, to the best of my recollection. It is shown

here as the 27th. I can't remember within a day at this time.

Q Now, I find that looking into the several spaces for notation of that date, that on July 27th there is nothing recorded on the San Antonio Water Company's wells; so that company's wells were not being pumped then or do you have any recollection of that at all?

A No. My remembrance is that the pumps were running but the weirs were closed with locks so that I could not make the measurements.

Q The first recorded date of your observations on the San Antonio Water Company's wells was what date?

A On the 2nd of August.

Q On the 2nd of August what year?

A 2nd of August, 1904.

Q They seem to run then consecutively forward, September, October, November, December, to January, 1905, and on the 7th of January, 1905, the recorded measurements of those wells seems to cease.

A Yes, sir.

Q Do you know nything about what occurred at that time the 7th of January, 1905?

A My remembrance is that we had rains and that the pumps were closed.

Q The next entry appears to be August 15th, 1905. Do you remember any circumstance connected with those figures appearing in any of the columns under the head San Antonio Company's wells?

A I made measurements of certain of the wells on the 15th and 16th.

Q When you say you made measurements on certain of the wells, do you mean the wells or measurements of the water flowing from the wells?

A Measurements of the weirs I should have stated, at the number 1 weir and at the number 8.

Q Well, that is the Haskell well, isn't it, 8?

A Yes, sir. Those were running and I had access to the weirs on those days and noted the flow.

Q Then there seemed to be blanks in the following spaces for quite a long time. Why was that?

A After the 18th the weirs were uniformly locked so that I didn't have access to them to make measurements and on those days I omitted it.

Q Did you receive any information from the San Antonio Water Company's or its employees on the grounds about the locking of the weirs? Did they tell you anything about it?

A No; there was nothing said to me by any official there that I remember.

Q Do you know during that time whether the wells were pumped?

A Yes; they were pumping.

Q But the weirs were locked and you couldn't make measurements?

A This doesn't show except an entry that I placed in here on the 18th that the wells were pumping, but the weirs were locked, and my understanding is that they were pumping continuously after this date, but I hadn't knowledge of the fact that they were pumping every day thereafter, nor what wells, except by referring to my original memoranda.

Q You have those memoranda so that you could make reference to them and ascertain about that?

A Yes, sir.

Q All right. Proceed down the column. I see you have measurements under date September 25, 1905.

A Mr. Trask was out in the district that day.

Q Mr. F.E. Trask the engineer of the company?

A Yes, sir; the engineer of the company. And together we measured the various weirs of both parties interested, and in that way I made the measurements on that date in company with Mr. Trask. And also on the 30th of the month again it is shown here.

Q Yourself and Mr. Trask?

A Yes, sir. On the 7th of October there was Mr. Trask and Mr. Clark, who thereafter accompanied me, Mr. Clark representing the San Antonio Water Company. We made the measurements of all the weirs thereafter from the 7th of October until the 4th of November following.

Q Do you know anything about the arrangement that was made between you and Mr. Clark or any of the officers of the San Antonio Water Company on that subject of the joint measurements ? Do you know personally about it?

A The only arrangement was that in the case of Mr. Clark or, formerly the earier measurements with Mr. Sanders, that I could make my measurements as Mr. Sanders opened up the boxes, and as I opened up the ones that I had the keys for with me, so that the only arrangement was the matter of the meeting.

Q What I wanted to know is whether you and Mr. Clark went

together for that period of several weeks and made measurements jointly, and how it happened that you and he were together?

A That was due to an arrangement made by Messrs. Purcell and Wright to arrange for the opening of these weirs so that I would have access to them.

Q You don't know of that arrangement personally except what they told you?

A They advised me of the fact.

Q You made the last measurements that you have on the San Antonio Water Company's wells , that is, the water flowing from them, on what date?

A On the 4th of November.

Q What year?

A 1905.

Q You continued your measurements on the weirs and wells of the Cucamonga Vineyard Company till some time next summer, omitting, however, the San Antonio Company's wells?

A Yes, sir.

Q I think there are some exceptions here to measurements of water, that is the flow of water, in that column under the head of West Hellman well. What were you measuring at that well?

A I was measuring the present height of the water below the top of the pipe in that well daily.

Q You mean the present height or the height as it appeared on that date?

A As it appeared on that date - on the dates shown. The

heights daily of the water, and also in the well known as Ar-m tesian well No. 2, which is marked here "West side well No. 2"

Q In the column under the head "West Hellman well" occur the words immediately below the top "Measures feet below casing". Does that mean the top of the casing?

A That means the top of the pipe casing - of the well pipe, - which is not at the surface of the ground, but a matter of 45 feet below the surface. There is a wooden shaft- an excavation - apparently made to that depth, and then a well driven from that point down, so that this pipe is accessible by means of a ladder to that point, the top of the casing being some 45 feet below the surface of the ground, the measurements being made then from the top of this casing to the surface of the water.

Mr. Chapman, Q Are you still referring to Hellman Well No. 2?

Mr. Britt: Yes, sir; the West Hellman Well No. 2. That is the well at the west branch of the "Y" tunnel.

A It is shown on the map. I don't know the connection of the well with the tunnel personally, because there was no evidence of it.

Q Is is near the head of the west branch of the Y tunnel?

A Yes, sir.

Q You climbed down the ladder every time you made your measurements?

A Yes, sir.

Q What did you measure from the top of the casing?

A I measured from the surface of the water to the top of the casing to determine the distance from the top of the

date.

Q Now, under the designation "cement shaft" being the fourth column from the righthand side of this map there seemed to be some entries: what do those indicate?

A This represents the measurement in miners inches of the flow of the tunnel water at that point of the cement shaft, of the weir.

Q What tunnel is that?

A Tunnel No. 2, as I am familiar with it.

Q West of the red hill?

A Yes, sir.

Q Can you show where that shaft is on this map, Plaintiffs' Exhibit1?

A I think it is about here. I judge this from seeing the artesian well and the number 4 and 4A points as shown. I know it is about a matter of 100 or 150 feet northerly from that.

Q That is 100 or 150 feet northerly from the points designated weir 4 and 4 A?

A Yes, sir.

Q And you point to the notation on the left hand side or near the lefthand side of plaintiffs' map, exhibit 1?

A Yes, sir.

Q And about an inch and a half or such a matter below the inscription "Well 14"?

A Yes, sir.

Q There is a column here on this tabulation headed with the inscription "Total at mouth of tunnel number 2". Now that includes the sum of what two measurements or more than

two, if such there were?

A That includes the sum of the measurements made at weir number 1 and number 2 at the mouth of tunnel number 2, and the summation of those two quantities is shown here in the first and second columns.

Q Was there any time during the course of those measurements that you were informed or received any information at the Haskell well or at any of those wells of the San Antonio Water company that you could not proceed with your investigations there?

A I think nothing was said to me by any one on the ground except, possibly, an understanding - I don't recollect of anything being said at this time.

Q You merely found some times that the weirs were locked?

A Yes, sir; the weirs were locked.

Q Now, during the time that the pumping was going forward in the San Antonio Water Company's wells and you were making measurements there, state how continuous that pumping was?

A They were pumping daily and seemingly continuously.

Q On what observation did you base the remark that they seemed to be pumping continuously?

A I made daily trips to the hills for the purpose of measuring these various weirs and noting them if these pumps were running and noting whether water was passing over those weirs, and I know of these wells being pumped at such times as I was on the ground, but inferentially that they were continuously pumping; at certain recurring trips throughout the 24 hours that the plants were in operation, led me to think that they were continuously in operation during that

1 particular period.
2 Q Were you there at night?
3 A Yes, sir.
4 Q You found them going in the night time?
5 A Yes, sir.
6 Mr. Britt: I believe with the exception of those blank
7 spaces down there which the witnesses thought were the pumps
8 in operation, although the tabulation shows nothing of it,
9 and as to which he desired to refer to his original memoranda,
10 that is all I want to ask him.
11 Cross Examination.
12 Mr. Chapman, Q You say you were employed by the Cucamonga
13 Vineyard Company?
14 A Yes, sir.
15 Q Who was the individual that did the talking with you or
16 communicating with you that led to your employment?
17 A Mr. Gervaise Purcell.
18 Q Is he an officer of the Cucamonga Vineyard Company?
19 A Not that I know of.
20 Q How did you ascertain the fact that it was the Cucamonga
21 Vineyard Company that employed you?
22 A I think he informed me of that.
23 Q Since you left the stand the other day?
24 A No; I think soon after I was employed or about that time.
25 Q You were informed by him that you were employed by the
26 Cucamonga Vineyard Company?
27 A Yes, sir.
28 Q What led up to the conversation after you were employed?
29 A The matter of my remuneration I think was the cause of it.

Q You think?

A Some little time after I was making these measurements on the question of my remuneration and whom to render an account to, I was told in what way so that I would know.

Q To whom to go?

A Yes, sir.

Q Have you had any conversation with him since you were on the witness stand the other day?

A Not a word.

Q Nor with Mr. Wright?

A No.

Q Nor with any one?

A Not in reference to this question.

Q To whom did you make your reports?

A To Mr. Purcell.

Q In comparing your notes with this sheet can you tell us whether all the measurements that you made are accounted for on this table here?

A Yes, sir.

Q All the measurements that you made?

A All the measurements I made.

Q Throughout that entire section?

A Yes, sir.

Q Are you still in the employment of the Company?

A No, sir.

Q How long since your employment ceased?

A Since the first week in June, 1906.

Q It began in July, 1904?

A Yes, sir.

Q And your employment related solely to the making of measurements of the San An Tonio Water Company's wells?

A Yes; that was all that I was required to do - was to make these measurements and report the measurements as made to Mr. Purcell.

Q You made measurements at the Hellman Well No. 2 did you not?

A Yes, sir.

Q That was included in the San Antonio Water Company's wells?

A I made the measurements of the Hellman well; yes; daily, as well as the others.

Q And did you include that or was that included in your opinion with the San Antonio Water Company's wells?

A It was merely one of my duties to make these measurements as directed, of these wells.

Q I understood you to say that your employment was for the measurement of the San Antonio Water Company's wells. Am I correct in supposing that you said that?

A No; not as being all that I was doing. I must have misunderstood you evidently.

Q What all did come within the scope of your employment?

A Measuring all of the wells or weirs within that district.

Q What district?

A The district shown on this map.

Q Does that map show the Lone Star district?

A I don't know the Lone Star district by name.

Q Do you know the Lone Star tunnel?

A No, I don't think I do.

Q Did you make any measurement of the Lone Star wells or waters?

A I made measurement of the well known as Lone Star number 2, I think; also known as number 5 in the numbering shown in that exhibit 5.

Q What number 5 do you refer to?

A Number 5 of the Cucamonga wells.

Q Cucamonga Water Company wells?

A Yes, sir.

Q You don't refer to the number 5 of the string of wells to the north?

A No.

Q Were the measurements of the Lone Star well to which you refer as number 5 recorded on this diagram?

A Yes, sir.

Q Did you make any measurements of the Sunset Water Company wells?

A I think not.

Q Did you make any measurements of the Old Settlers' well?

A I don't know that well by that name.

Q Did you make any measurement of the Hermosa Company's wells?

A No.

Q Every measurement that you did make, and whatever well it is, is recorded on this diagram or table?

A Yes, sir.

Q Totgether with the date when it was made?

A Yes, sir.

Q Did you make any measurements of the creek water - Cuca-

monga Creek?

A I made no very precise measurements of the creek water. I think at one time during a flow of water after a rain I made a rough approximation of the water flowing in Cucamonga Creek.

Q Whereabouts in the creek did you make the measurement?

A It was merely an estimate. Near the county road bridge south of the Mountain View Hotel.

Q Do you know where the point of division is between Cucamonga Vineyard Company and the Cucamonga Water Company of the waters of the creek and that Y tunnel? Do you know where it is?

A I don't understand the question.

Q Do you know that the Vineyard Company takes one half of the waters from the Cucamonga Creek?

A I don't know what amount they take from that.

Q Do you know that they do take some?

A All I know of that is the amount of water which I guaged at the number 8 weir or creek division box as it is called, daily.

Q You did make measurements there?

A Yes, sir.

Q And they are shown on this table?

A Yes, sir.

Redirect Examination.

Mr. Britt, Q State whether you made the measurements at the various points as you were instructed by Mr. Purcell?

A I did so, to the best of my ability.

Q Were your measurements correct?

A I endeavored to have them absolutely correct as near as it was possible.

Q You made some measurements jointly with Mr. Clark?

A Yes, sir.

Q Do you know in what business Mr. Clark was engaged?

A I think he was a collector of gas rates or electric charges of some kind through the community, and an insurance agent, or something of that kind; not a technical man, by his own statement to me.

Q You and he went together and made a quantity of measurements: do you know whom he was representing at that time?

A He was representing the San Antonio Water Company.

Mr. Britt: We offer in evidence this tabulation of the results of Mr. Reed's measurements as they are shown on Exhibit 3, the previous offer having been of measurements made by Mr. Marsh.

The Court: And also of measurements made conjointly with other people?

Mr. Britt: Yes, sir.

The Court: It will be admitted.

Recross Examination.

Mr. Chapman, Q How do you know he represented the San Antonio Water Company?

A How do I know that Mr. - -

Q Clark represented the San Antonio Water Company?

A By his having the keys of these weirs and going with me to make these measurements and keeping a record of them for the San Antonio Water Company. I mean merely an agent in the sense that he was acting to allow me access to the weirs

daily to make these measurements, and his requiring the privilege of making the measurements of the wells of the Cucamonga Company also.

Mr. Britt, Q Did he assist in making the measurements of the wells of the Cucamonga Company?

A He made his own measurements of those weirs, yes.

-o-

S. G. COUSINS.

S. G. Cousins, heretofore sworn and examined, being recalled by plaintiffs, testified as follows:

Direct Examination.

Mr. Waters, Q Have you made a map showing the lands of the Old Settlers situated on the Cucamonga Ranch, and one outside of the boundaries of the Cucamonga Ranch?

A Yes, sir.

Q I hand you a map: Did you make that?

A Yes, sir.

Q What is shown upon that map?

A The exterior boundaries of the Cucamonga Ranch.

Q Represented by what? The outside black lines?

A The outside black line.

Q Is that map to a scale?

A Yes, sir.

Q What scale?

A 880 feet to the inch.

Q I find upon this map certain squares marked consecutively lots 1 to some larger number - - 17 is it?

A Yes, sir.

Q What do these squares represent?

A They represent the holdings of the

separate individuals of the Old Settlers Water Company.

Q And you are familiar with those tracts on the ground?

A Yes, sir.

Q Are they correctly located on this map , relative to the exterior boundaries of the Cucamonga Ranch?

A Yes, sir.

Q I find a line in yellow and an inscription "30 inch cement pipe": What does that yellow line represent?

A That represents the pipe that conveys the water from the intake at the creek.

Q At what creek?

A Cucamonga Creek.

Q And extending where to?

A And leading into the division box south of the brick hotel.

Q And the square which you have at the lower end of that pipe line, near the inscription "Division box" is made to represent that division box?

A Yes, sir.

Q Now from that division box on down to the point marked with a figure 3 in a circle and a black square where I find the inscription "division box", what does that represent?

A That yellow line represents the cement pipe marked "22 inch cement pipe", and it is the line which conveys the water from the division box south of the brick hotel to the division box known as the Old Settlers' Division Box on Hellman Avenue.

Q That is a 22 inch cement pipe line?

A Yes, I understand so.

Q Now then, at the point marked 3, that is on what street if any?

A Hellman Avenue.

Q From the point marked 3 I find extending below and eastward a continuation of the yellow line on which is inscribed the words "Old Settlers' Pipe": What does that represent?

A That is the pipe line that takes the Old Settlers' water from the division box into their distributing system.

Q I find other yellow lines radiating from that east and south: What are those yellow lines and what do they represent?

A It is the general distributing system of the Old Settlers Water Company.

Q As it exists on the ground?

A Yes, sir.

Q I find a yellow line extending northward to a point where there is a circle marked "Old Settlers Well" on lot 1: What does that yellow line represent?

A That represents the pipe line connecting that general system with their well situated on lot 1.

Q Now, lot 1, what place is that?

A. That is called the Old Settlers Water Company's lot.

Q It has not name as a farm or orchard?

A No, sir.

Q Lot 2 is what?

A D.L. Davenport lot.

Q What place is that called?

A The Davenport place.

Q Lot 3 is what?

A The Frank Smith place.

Q Lot 4 is what?

A The Oscar Wilkenson place.

Q 5?

A D.R. Kilburn's place.

Q Lot 6?

A The Fox place.

Q Lot 7 is what?

A It is that was the J.I. Hall place. It is now the Baxman place.

Q In the southwesterly corner of that I find a subdivision.

A That is the Cucamonga School District lot.

Q Lot 8 is what?

A The Manchester lot. It is now the Ora Oak.

Q Lot 9?

A The Elizabeth Smith lot.

Q Lot 10?

A The Denham lot.

Q Lot 11?

A The Norwood property.

Q Lot 12?

A The Feron lot.

Q Lot 13?

A Stinchfield.

Q Lot 14?

A Miller.

Q 15?

A S. B. Kincaid.

Q 16?

A Mrs. Kincaid.

Q 17?

A John Maddock.

Q The Maddock place, is that within or without the Cucamonga Ranch?

A To the best of my knowledge it is without the Cucamonga Ranch.

Q I find a certain tabulation upon this map. Take the one to the left hand. What does that represent or intend to represent?

A The first column is the figures 1, 2, 3, 4, 5, and so on down to 13, and is the numbers which are marked on certain portions of the exterior boundaries and opposite to those several numbers there is letters indicating the course or direction west, north, east or south.

Q What does it mean? What is it for?

A It stands for the course of the line on which the numbers are placed in the exterior boundaries.

Mr. Chapman, Q And commencing with number 1?

A Yes, sir; and numbering consecutively.

Mr. Waters, Q To what in the world do they relate? Do those numbers relate to these lots?

A The exterior boundaries of the ranch.

Q What is it for?

A I will explain, commencing with number one -

Mr. Chapman, Q Is that a station called in the ranch land?

A No, sir; it is not. We have number 1 marked on the line.

The Court, Q It indicates a course?

A And in the next column headed by the word "Course" it says "west".

Mr. Waters, Q Have you merely copied that off some map?

A Yes, sir.

Q Does it serve any purpose for this subject matter for which I am having you make this map, or it merely an inscription that you found on the map from which you took these exterior boundaries? Is this a table that you made or did you copy it from some map?

A It is copied from a map.

Q Then I don't care anything in the world about it. Consider that it is off of themap.

Mr. Chapman: It is not off.

Mr. waters: I will have it marked off.

Mr. Chapman: If you let him talk he will explain it.

Mr. Waters: It is something with the exterior csurvey.

Mr. Chapman: And that exterior survey would extend along here and bound these lots that you have been talking about.

Mr. Waters: The testimony of the witness is that this black line is the boundary of the ranch, and that is all I want to know.

Mr. Chapman: There are several black lines.

Mr. Waters: But there is only one set of exterior black lines. I don't propose to get confused about it.

Q This next tabulation, does it relate to the subdivision you have made here?

A Yes, sir.

Q Explain it?

A It is a copy of the stock book - or a partial copy of the

stock book of the Old Settlers Water Company.

Q Now, then, I see you have there the inscription "Lot 1, Old Settlers Water Company -

A Contract of sale to William Freeman (?) 20 acres, 2 1/2 inches of water from well.

Q Where did you get that?

A I got that from the secretary of the Old Settlers Water Company.

Q And each one of these inscriptions now, corresponding and following down in columns underneath the ones which you have read, down to number 17, are of the same subject matter and relative to each one of these lots?

A Yes, sir.

A Yes, sir.

Mr. Chapman: You are not trying to prove title now?

A No, no, not at all.

Q That is merely put there for what purpose?

A To show the divisions of the water on the several different lots, I suppose.

Mr. Chapman, Q Do you suppose?

A Because the shares of stock call for so much water - a proportionate part for each lot.

Mr. waters: I shall not offer any of that data.

Mr. Chapman: May be we will want to offer it.

Mr. Waters: Then I may object to it or not.

Mr. Chapman: Then don't scratch it out yet.

Mr. waters: And whenever you start to do something we will take care of it. I offer this map now illustrative of the testimony of this witness.

Q Mr. Cousins, do you know anything about water having

run to waste from the Eady tunnel at any time?

A Yes, sir; I think I do.

Q State what you know about that, when it was, and how much and under what circumstances?

A I don't remember the dates.

Q Give us the year?

A Last winter I observed water coming from certain hydrants to the westward of the Eady tunnel, and in the year before I saw water escaping from the box about half way along the line from the Eady tunnel to the eastern boundary of the Ontario Colony lands.

Q How much water was escaping?

A I don't know.

Q About how much?

A When I saw it escaping from the box as I have just explained, I should judge there might be somewhere in the neighborhood of 100 inches of water.

Q Where was that water running to?

A Down the wash.

Q Down what wash and in what direction?

A Tributary to the Cucamonga wash and in a southerly and southeasterly direction.

Q Where would it naturally run to from that point? To any place of use or merely to waste?

A Merely to waste in the Cucamonga wash.

Q Now, when was it that you saw that stream of water so going?

A I think it was a year ago last winter.

Q Was it escaping from some pipe line?

A Yes, sir.

Q Well, what pipe line was it?

A I think it was an overflow to this box that I described.

Q Well, what pipe line was it coming from?

A The pipe line that is leading into the box to the best of my knowledge comes from the west side tunnel and belongs to the Ontario Power Company or the San Antonio Water Company.

Q And that pipe line is connected with the Eady tunnel, is it not?

A Yes, sir.

Q At this other time, this past winter when you say you saw water escaping, you say you saw that escaping from certain hydrants?

A Yes, sir.

Q Where were those hydrants situated?

A They were situated on the eastern side of the Colony lands, and just north of the Santa Fe railroad.

Q Eastern side of the Colony lands, of What Colony? Cucamonga?

A No, sir.

Q Well, what colony?

A I don't know where the exact eastern boundary of the Ontario Colony lands are, but it is north of the Santa Fe Railroad, and just east of the avenue - I don't know the name of it.

Q Where is it with reference to the Red hill?

A It is southwest of the Red Hill.

Q How far distant therefrom?

A 2 miles I think or 3 miles possibly.

Q And on what aqueduct was that or pipe line?

A Well, I understood it was on part of the system of the San Antonio Water Company.

Q Was the location of it on a line between the Eady tunnel the mouth of the Eady tunnel and Ontario? Was that the general locality of it?

A I think it was connected with that pipe line that leads to the Eady tunnel.

Q How much water did you see escaping there, about?

A Oh, 50 or 60 inches, I should judge, or 75.

Q How many?

A 50 or 60 or 75 inches.

Q Where was that water running to?

A It was running down over the rocky land, and wash lands.

Q Running to waste?

A Running to waste apparently.

Cross Examination.

By Mr. Chapman, Q When did you first see that water running to waste?

A I think it was a year ago last winter.

Q What time in the winter?

A I don't remember; sometime during the early spring months or winter months.

Q Of 1906?

A I coulan't say.

MR. WATERS: I now offer that map.

The Court: I understand that Mr. Waters now offers the map, Mr. Chapman.

Mr. Chapman: I understood him to offer it before with certain

reservations; he stated before that he did not propose to offer those notations.

Mr. Waters: I offer them, leaving out the two tables at the left, those explanatory tables at the left.

The Court: With that understanding it will be admitted.

(Marked Plaintiffs Exhibit 8)

Mr. Chapman, Q You say you don't remember, you don't know whether it was in the Spring of 1906, 1907, or 1908?

A It might have been in the Fall of 1908. I don't remember. I know I have seen water running to waste there.

Q You don't know whether it was in the Fall of 1908 or the Spring of 1906?

A I couldn't say definitely.

Q Do you know it was either?

A No.

Q How far from the mouth of the tunnel was it that you observed that?

A It must have been a mile and a half or two miles.

Q And coming out of some pipe you say?

A Yes, sir.

Q Do you know whose pipe it was?

A I suppose it was the San Antonio Water Company's pipe or Ontario Power Company.

Q You suppose: Did you know?

A I couldn't swear to it; no, sir.

Q How does the Cucamonga Water Company take its water from that tunnel? By what means does it take it away?

A Pipe line.

Q And goes where?

A Some of it goes into the Blackburn addition south of Ontario.

Q What I mean is what is the general direction of that pipe of the Cucamonga Water Company?

A Easterly.

Q Easterly and southerly?

A The beginning of it is southerly; yes, sir.

Q And for what distance is it southerly? For what distance southerly does it extend?

A From the tunnel I should judge it might extend southerly probably 500 feet may be.

Q Are you an officer of the Cucamonga Water Company?

A No, sir.

Q Have you ever been?

A Yes, sir.

Q How long since your relations with that company ceased?

Mr. Waters: Objected to as not responsive.

Mr. Chapman: I want to inquire about his knowledge of that Company Water Company.

Mr. Waters: I withdraw that objection; let it go.

Q When did your connection with the Cucamonga Water Company cease?

A I think in the fall of 1905.

Q 1905?

A I think so.

Q You were a director of the company were you not?

A Yes, sir.

Q How long had you been a director?

A One year.

Q No more?

A I think it was one year.

Q Were you also the engineer of that company for that year or had superintenence of the engineering?

A No, sir; I did some work for them at different times.

Q Were you not throughly acquainted with their whole system?

A Their distributing system?

Q Yes, sir; and their main lines by which they conducted the water, and the distributing system, too?

A No, not entirely so.

Q Well, you did have some information of the fact that as shown on this map which has just been offered, plaintiffs' exhibit 8, that the water is conducted by the Cucamonga Water Company through this 22 inch pipe down to a place which you call the division box, where the Old Settlers get the water?

Mr. Waters: I will ask you in the same spirit you asked me a while ago whether you are proposing now by this evidence of this witness to prove that the Cucamonga Water Company has had the handling and distribution and control of the Old Settlers' Water Company's water?

Mr. Chapman: No. This 22 inch pipe line is what I am asking about, the manner in which it was constructed and who paid for it, and you have already gone into that.

Mr. Waters: So I have. But you have attempted to make it appear several times that the Cucamonga Water Company have had control of the Old Settlers' water.

Mr. Chapman: No, sir; I have not tried to make it so appear.

Q The water that belonged once to the Cucamonga Water Com-

pany is conducted through this 22 inch pipe down to this circle within which is the figure 3: is that correct?

A I don't know; no, sir.

Q Didn't you tell us in your direct examination that that place, figure 3, represents a division box?

A Yes, sir.

Q And that the pipe below that is the Old Settlers pipe by means of which they take their water from the 22 inch pipe to the place of distribution among themselves?

A As it is so arranged, I should judge so. I never saw the inside of the box very much. There is ~~xxxx~~ a big box there and there is another pipe that comes down from the north to this division box.

The Court, Q That is on Hellman Avenue?

A Yes, sir.

Q You say there is another pipe comes down there from the north?

A I believe there is another one that comes down from the northward.

Q You testified that the yellow line that extends north extends to a well, known as the Old Settlers well?

A Yes, sir.

Q And that pipe belongs to the Old Settlers as I understand you, and conducts the water from that well down to this pipe line box mingled with the other waters of the Old Settlers and is used in the same way?

A Yes, sir.

Q Do you know that?

A I saw them when they were putting the pipe in, and I

1 know that the water coming from the well comes out in this
2 pipe below. I have seen it so I must know that.
3 Q Where didyou get your information from which you made up
4 this map?
5 A It mostly came from the records.
6 Q What records?
7 A The records in the office here - the county recorder's
8 office, giving the size of the lots; and also from the
9 records of the assessor's office.
10 Q You didn't get those pipe lines from the records of the
11 recorder's office, did you?
12 A No, sir; I was just going to say that related to the
13 lots ofx land.
14 Q Where didyou get the information about the pipe?
15 A By asking the people along the line where the pipe line was
16 Q Didn't you have any knowledge of it yourself?
17 A Not very much. I know certain starting points and
18 certain points where the water comes out. That is all I
19 know personally.
20 Q Are you not acquainted with the wells, tunnels and
21 pipe lines throughout this section of country?
22 A Pretty much so.
23 Q And haven't you got that knowledge from your own
24 observation?
25 A A good deal of it.
26 Q You have been with the Sunset Water Company how long?
27 A 4 years I think.
28 Q Haven't you had the general charge of the operations of
29 that company?

Mr. Waters: I submit there is nothing on the map about that nor in the direct testimony, about the Sunset Company, or its pipe line.

The Court: This is not the first time he has been upon the stand.

Mr. Chapman, Q You have been there for 4 years?

A Yes, sir.

Q What has been your general employment, what have you been engaged in?

A Ranching, fruit growing.

Q Well, for the company? What have been your services for the Sunset Water Company?

A Why I have had the direction of the operation of the plant.

Q The water plant?

A Yes, sir.

Q The pumping for it?

A I have never run the pumps.

Q Well, you superintended and directed?

A Yes, sir; I directed it.

Q Did you have anything to do with the construction machinery?

A Yes, sir; I had all to do with it.

Q You had all to do with it?

A Yes, sir.

Q And one of the Sunset wells I believe you said was bored since you were there?

A Yes, sir.

Q Didn't you do that or superintend it?

A I was on the ground most of the time; it was done by contract.

Q You have made a good many measurements of water I believe in this action?

A Some; not very many.

Q Employed by whom in this case? Mr. Haskell, didn't you say?

A Do you mean quantities of water?

Q Yes, sir.

A No, sir.

Q Well, I mean the depth of water in the wells?

A Yes, sir.

Q And you have been all over there repeatedly?

A Yes, sir.

Q And haven't you a pretty thorough acquaintance with the systems not only of the Sunset Water Company but the other people through there?

A A fair acquaintance, yes, sir; ofcourse there is some of it buried under the ground that I can't testify to exactly.

Q But you do know where water is taken from the Cucamonga Creek into this 22 inch pipe, don't you?

A Yes, sir; pretty near.

Q Don't you know exactly where it is?

A No, sir; not exactly.

Q You know where it conducts the water to don't you?

A Yes, sir.

Q You know the people who use the water after it is conducted to them?

A Many of them.

Q You know the Cucamonga Vineyard Company's pipe line that conducts the water to their place, do you not?

A No, sir.

Q Dind't you in your testimony the other day say something about a 16 inch pipe that was used to conduct water around there to the vineyard?

A No, sir; I don't think so.

Q You don't know anything about it?

A 16 inch pipe; no, sir; not to the Vineyard Company.

Q What Company if any?

A Cucamonga -

Q Cucamonga Water Company?

A There is another pipe around the Red Hill marked on that map.

Q Do you know it? Have you any personal knowledge of it?

A No, sir; I never saw it.

Q You don't know where it conducts the water to there?

A Well, I know where the outlet is.

Q Where is the outlet of it?

A It is on Hellman Avenue.

Q well, that is where it conducts the water to, isn't it?

A I suppose that is the pipe.

Q Do you know where that water is used?

A No, sir; I never saw it being used.

Q One of the Sunset wells was sunk before you came there, I believe, was it not?

A Yes, sir.

Q And has it been pumped ever since you have been there?

A Yes, sir.

Q When was the western well sunk? 1905 did you say?

A No, sir; I didn't say. The west well was somewhat earlier than that; I don't know the exact date.

Q Since you went there?

A No, sir; before I came there.

Q Wasn't one of them sunk since you came there?

A Yes, sir.

Q Which one was that?

A The eastern well.

Q When was that?

A That was about 1905 I think.

Q That was the one in which you yourself superintended personally in the sinking of it?

A Yes, sir.

Q Had you pumped the western well before that one was sunk?

A Yes, sir.

Q And sent it down?

A Yes, sir.

Q And about what quantity of water did they get before the eastern well was sunk?

A When they first pumped it I understood they had in the neighborhood of 40 inches, and when I was pumping it got down to 25 inches.

Q And that was before the eastern well was sunk?

A Yes, sir.

Q And after the eastern well was sunk I believe you testified that you got about 25 inches from each of them?

A Yes, sir.

Q Do you know how much of the time this western well was

1 pumped from the time you came there until now?
2 A Pretty near continuously during the irrigation season.
3 Q What months constitute the irrigation season?
4 A From November about - or from June until November about.
5 Q I suppose it depends very largely upon the season, does
6 it?
7 A Yes, sir.
8 Q Sometimes they pump a good deal in the winter do they
9 not?
10 A No, sir; I don't think they have ever pumped in the
11 winter; they have pumped in December, the early part of
12 December.
13 Q And in January?
14 A No, sir.
15 Q In February?
16 A No, sir.
17 Q None of the seasons since you have been there?
18 A No, sir.
19 Q Now, you say from June until November?
20 A Yes, sir.
21 Q Those were the months to which you allude when you speak
22 of the irrigating season?
23 A Yes, sir.
24 Q They may begin earlier or continue later according to
25 the season?
26 A Yes, sir.
27 Q Do you remember what year it was that you were a
28 director of the Cucamonga Water Company?
29 A I think it was in 1903, I think. I don't remember.

Q Was the water being pumped during that year, 1903?

A Water being pumped?

Q Yes; at the Sunset wells, Cucamonga wells and Lone Star wells?

A The Sunset wells were pumping, one of them.

Q How about the Cucamonga Water Company's?

A I think they were operating one well.

Q Do you know about what quantity was being pumped?

A No, sir.

Q I want to ask you about these notations on this map: they are designed to inform us as to the meaning of certain signs and figures on the map, are they not?

A Yes, sir.

Q Well, now, you start in with this table to the left, on the west side, and I believe you pointed out where this number 1 was, and you said that the W stood for west. What does the next number stand for?

A Under the column of distances, 22 chains from the point of beginning.

Q From 1 to 2 is 22 chains?

A No, sir; from the point of beginning. The course 1 is west 22 chains.

Q Where does it land you? Didn't you point out on the map where 1 was?

A Yes, sir; it is that line.

Q Where is 2?

A 2 is the next line.

The Court: It is the next course as I understand it.

Mr. Chapman, Q And that gives the course and distance of

line 2?

A Yes, sir.

Q And so on around to 13, north 98.7?. Where is that 13? The figure 13, what line does 13 represent?

A It is the closing line of the boundary.

Q And beginning with the southwest corner of the lands marked on your map and extending to number 1?

A Yes, sir; the place of beginning.

Q The marks and figures then and the general symbol there gives a description of the exterior boundaries of the entire tract?

A Yes, sir.

Q And that is all?

A That is all.

Q Now, in this other table, where you have lot number 1, you have also the name of a person haven't you?

A Yes, sir.

Q And the name is what?

A Well, number 1 is Old Settlers' Water Company.

Q The next is what?

A D.L. Davenport.

Q The columns to the right represent acres and shares of stock?

A Yes, sir.

Q And you got all that information now?

A From the secretary.

Q Are these persons the same or any of them the same whose names you give us as the owners of lots here?

A Most of them I know personally, and live on the land.

Q In direct examination in response to questions of Mr. Waters you gave us the location of the lands of various persons whose names were called to you - -Are the names of those persons contained in your table here?

A Yes, sir.

Q And this is a list of the names and shares of stock and the acres of land and descriptions of the Old Settlers and the stock which they held.

Mr. Waters: I object to that as incompetent.

Mr. Chapman: I am not trying to prove the title of the stock but just simply let the witness explain what these things are intended by him to represent; whether they truthfully represent anything or not I am neither knowing nor caring; but I think the tables are harmless in connection with this and they are thus explained.

The Court, Q You stated that you got your information from the secretary as to this stock: the secretary of what company?

A The secretary of the Old Settlers' Water Company.

-o-

Here the court takes a recess until 2 o'clock p.m.

-o-

Afternoon session, 2 p.m.

FREDERICK H. REED.

Frederick H. Reed, a witness previously sworn, being recalled by plaintiffs, testified as follows:

Direct Examination.

Mr. Britt, Q Now, Mr. Reed, this morning in giving the history of your measurements of the San Antonio Water Company's wells north of the Base Line, you came to a time and date about

August 18th, 1905, which was marked on this tabulation, plaintiffs' exhibit 3, "Pumping but weirs locked"; but you explained that by saying, in substance that the wells of the San Antonio Water Company were being pumped at that time but that you did not have access to the weirs so that you could measure them; so for quite a time there appears to be no measurements noted on this tabulation. You were requested to consult your original notes to see whether the wells were pumping during that time.

A Yes, sir.

Q Have you now consulted your notes?

A I have done so; I have consulted my notes and I made a memorandum of the dates that the wells were pumping but on which we were not able to measure them.

Q You may give the dates on which the wells were being pumped and on which you were not able to measure them for the reason that the weirs were locked. Give the dates the weirs were locked and what wells were being pumped on those dates.

A The first notation I have here is August 15th, well number 8 was pumping. August 16th, wells 1 and 8. August 25th, wells 1 and 2; August 26th, wells 1, 2 and 8. August 30th, wells 1, 2 and 8. August 31st, wells 1, 2 and 8. Also wells 1, 2 and 8, September 1st to 12th inclusive. September 13th, wells 1, 2, 3, 6 and 8. September 14, wells 1, 2, 3, 6 and 8. September 15th, wells 1, 2, 3, and 8. September 16th, wells 1, 2, 3, 4, and 8. September 18th, wells, 1, 2, 3, 4, 6 and 8. September 19th, wells 1, 2, 3, 4, 6 and 8. September 20th, wells 1, 2, 3, 4, 6 and 8.

September 21st, wells 1, 2, 3, 4 and 8.
September 22nd, wells 1, 2, 3, 4, and 8.
September 23rd, wells 1, 2, 3, 4, and 8.
September 25th, wells 1, 2, 3, 4, and 8.
September 26th, they were measured on that date I believe with Mr. Trask, I think it is shown on the exhibit number 3.
September 27th, wells, 1, 2, 3, 4, and 8.
September 28th, wells 1, 2, 3, 4, and 8.
September 29th, wells 1, 2, 3, 4, and 8.
September 30th, wells 1, 2, 3, 4, and 8.
October 2nd, wells 1, 2, 3, 4, and 8.
October 3rd, wells 1, 2, 3, 4, and 8.
October 4th, wells 1, 2, 3, 4, and 8.
October 5th, wells 1, 2, 3, 4, and 8.
October 6th, wells 1, 2, 3, 4, and 8.
On October 7th they were measured with Mr. Trask and thereafter they were measured in company with Mr. Clark.

Q 2 or 3 times in the course of your testimony and particularly once near the close of the testimony that you gave this morning you distinguished between the wells of the San Antonio Water Company and the wells and weirs of the Cucamonga -- once or twice you said Cucamonga Water Company and once or twice I think you said Cucamonga Vineyard Company: what do you mean by those designations, particularly Cucamonga wells?

A I am not speaking of the Cucamonga Vineyard Company's wells or Cucamonga Company's wells or Cucamonga Water Company's wells. The ones which I measured under direction of Mr. Purcell, as distinctive from the wells of the San Antonio

Water Company, simply.

Q You do not mean to indicate the ownership of any of those wells or weirs?

A No, I know nothing of the ownership of the property.

Mr. CHAPMAN. Q Those days on which the wells were pumping and on which there was no measurement made were all in the year 1905?

A All that I have recited here, yes, sir.

--o--

JOHN McDOCK.

JOHN McDOCK, a witness produced by plaintiffs, being first duly sworn, testified as follows:-

Direct Examination.

Mr. Waters: Q Where do you reside?

A Cucamonga.

Q How long have you lived there?

A About 25 years.

Q How old are you?

A 54.

Q What year did you come to Cucamonga?

A '82.

Q Did you own then or go into the occupation and possession of any land there?

A Yes, sir.

Q How many acres?

A 20 acres.

Q That place then became known as the McDock place?

A Yes, sir.

Q Is it yet known by that name?

A Yes, sir.

Q Do you live upon it yet?

A Yes, sir.

Q Have you lived upon it all the time since you went there?

A Yes, sir.

Q When you first went there did you get a deed immediately or some other kind of a piece of paper?

A I got a contract in the first place.

Q You got a contract for the purchase of that land?

A Yes, sir.

Q I will ask you to look at that piece of paper. Did you ever see that before?

A Yes, sir.

Q What is that paper?

A A contract of purchase.

Q Is that the piece of paper you got when you went into possession of the land?

A Yes, sir.

Q From whom did you get it? What was the man's name?

A Higgins.

Q What was he doing there?

A He was the agent for the company. He was acting as the agent for the company.

Q Did he put you in possession of any land?

A Yes, sir.

Q What land?

A The land I have possession of.

Q Do you know the description of it?

A Yes, sir.

Q What is it?

A The north half of the north west quarter of the north east quarter of section 15, township 1 south, range 7 west.

Q San Bernardino Base and Meridian?

A Yes, sir.

Q Have you got any title deeds at home to that land?

A Yes, sir.

Q Next time you come in bring them.

Mr. Waters: We will offer this contract in evidence. (Contract admitted in evidence as plaintiffs' Exhibit 9, and read as follows:

PLAINTIFFS' EXHIBIT 9.

Cucamonga , San Bernardino Co. Dec. 20, 1881.

$50. Recd from John Maddock the sum of Fifty Dollars gold coin of the United States, being the first of six yearly installments of the same amount, payable on the 20th of Dec. of each succeeding year, with interest on the deferred payments at the rate of eight per cent, per annum. On the due payment of all these installments, at the dates and with the interest specified the Cucamonga Company engages to make him a sufficient conveyance of the N. W. 1/4 of the N.W. 1/4, of the N. E. 1/4, Sec. 15, T. 1 S. R. 7 W. San Bernardino base and meridian with the same proportion of the water from the springs belonging to the company that his land bears to all the land which can be reasonably irrigated for semi tropical culture with said water, reserving a right of way over said land for the conveyance of water to lots beyond and along its border for roads.

J. H. Higgins, Agt,

Endorsed: Recorded at Request of John Maddock, April 21st, A. D. 1884, at 7:35 A.M., Book D of Agreements, page 526, W. F. Holcomb, County Recorder.

Q What was this man Higgins doing at Cucamonga?

A Acting as agent of the company.

Q Was he or not in possession of these lands when you came there, of the company?

A Yes, sir; the lands of the Company.

Q And he delivered this paper to you?

A Yes, sir.

Q And you paid him the $50?

A Yes, sir.

Q And you remained then in possession?

A Yes, sir.

Q I understood you to say that you went there in '83. I notice this date is '81. How does it happen?

A I bought it in '81; I moved on to it in '82.

Q At that time did you get any water in '82?

A Yes, sir.

Q In what way? Through what kind of a water way?

A A dirt ditch; an open ditch.

Q And you used the water of that how long in the earthen ditch?

A I think it was only about a year or two, 1 or 2 years.

Q Then what did you use it through?

A They put it in a flume from the divide in the Cucamonga Vineyard to Archibald Avenue.

Q You got the water in some way?

A We got it in an open ditch from the flume to our ranches.

Q Did you remain there until 1886?

A Yes, sir.

Q And at that time did any sort of a dispute arise between you and others with the company?

A Yes, sir.

Q What about?

A Not having sufficient water. They wanted to spread the water further.

Q Did you settle that dispute?

A Yes, sir.

Q How did you settle it?

A By taking a specified amount of water.

Q From what sources or source? You got a deed for it?

A Yes, sir.

Q And that deed tells its own story?

A Yes, sir; we quit-claim deeded to them for our right, title and interest to [illegible] rings and took a deed for an inch to 8 acres.

Q And that was all in writing?

A Yes, sir.

Q Now with reference to the making of an aqueduct for the carrying of that water: Did you have any understanding about what you were to do about the aqueduct?

A Yes, sir.

Q What was that understanding?

A We paid half for the putting in of the pipe from the

division gate, from the Cucamonga winery, to the sand box on Hellman Avenue.

Q Did you parties pay your part of the expense of that pipe line?

A Yes, sir.

Q Did you get your water through that pipe line?

A Yes, sir.

Q At the end of the 22-inch pipe line at Hellman Avenue was there anything to measure the waterin?

A Yes, sir.

Q What kind of a measuring apparatus was that?

A It was a two-inch slot under what was called a four-inch pressure of water.

Q What I want to know is how much did the old settlers or you and your associates get out of the stream of water at that place?

A Nearly 34 inches. Not quite 34 inches.

Q How was it arranged with reference to the order your water should come in, whether yours was the first water or the overplus?

A Ours was the first. We took the underflow and they took the overflow.

Q And then any fluctuation of the stream went to you or the other parties?

A Any decrease went to them. We got our amount and what there was over our amount the otherparties got.

Q Yours was then a constant stream?

A Yes, sir.

Q Without change?

A Yes, sir.

Q When you began to get water in that way, in what year was it? If you don't remember the year, do you remember the occasion? Did you begin to get it when the pipe line was put in?

A Yes, sir.

Q How long did you continue to get it?

A All the time.

Q Have you got it right down to this date?

A Not the full amount.

Q Up to what time did you continue to get your full amount?

A I think it was about in ninety--

Q How many years ago?

A About six years, I think, since we didn't get our full amount.

Q What use has been made of that water?

A Irrigating trees.

Q Do you remember where the different farms of the old settlers were situated?

A Yes, sir.

Q Are you familiar with the lay of the country where these farms are?

A Yes, sir.

Q (Showing witness map.) Say this yellow line is the 30-inch pipe line beginning at the springs and running down to the brick hotel. The 22-inch pipe line extends from that to the point marked 3. From there can you state where those farms were that the old settlers irrigated? Do you recognize them as located on this map?Here is the end of the 22-inch

pipe at the figure 3, at Hellman Avenue. Do you recognize the location of those places, or not?

A No; I do not.

Q All right. That ends it. I don't want anything a man don't know.

Q During this time that you lived at Cucamonga did you ever go up and look at the Cucamonga Creek? Did you ever see it?

A Yes, sir.

Q Do you know anything about estimating quantities of water? You have irrigated with that stream at Cucamonga?

A Yes, sir.

Q And you have irrigated there with what kind of a head of water? What amount of water?

A All the way from 34 to 60 inches.

Q When did you first see the stream of Cucamonga Springs?

A In '74.

Q How big a stream was it then?

A We crossed it in March, '74, and it came up to the hubs of the wagon in '74.

Q Where did you cross it?

A Right below where the bridge is now.

Q Quite a stream?

A Yes, sir; it was then.

Q How wide was it?

A About 20 feet wide.

Q Did you see it in the summer season or irrigating season of any year after that?

A Yes, sir; I crossed it every once in a while since.

Q You have seen it in many irrigating seasons in the summer since?

A Yes, sir.

Q About how big a stream has it usually been when you saw it prior to five or six years ago?

A A couple of hundred inches through the summer time, and in the winter time and fall it was more than that.

Q During the time that you lived there at Cucamonga about how much water does the stream usually run in the summer time up to the time of the shortage that you spoke of?

A From 150 to 200 inches.

Q What did you notice as happening at about the time the stream from the Cucamonga Springs got smaller or decreased? What did you notice was happening about the country there?

A Developing and tunneling and putting in wells, and the water decreased.

Q It was after that that you noticed the shortage?

A Yes, sir.

Q To what extent did the stream shrink in the course of time?

A It went almost dry.

Q How low did you ever see it?

A There was just a little bit of a stream; may be a couple of inches.

Q And when was that? What year? How many years ago?

A I don't recollect.

Q Was it 5, 10, 15, 20, or 30 years ago? Give us some kind of an idea.

A Threeor four years ago.

Q At any time within the past three years or during the time when this water of the springs had been low, have you ever seen water wasted anywhere in that neighborhood?

A Yes, sir.

Q Where have you seen water wasted?

A I have seen water wasted on the north side of the San Bernardino road, west of what is called the Eddy tunnel. I saw water wasted south of Eighth street and east of Campus Avenue.

Q Of what colony is Eighth street and Campus Avenue?

A Ontario.

Q Can you mark it out on that map of Ontario? Can you put your finger on that place?

A I think I can. It does not show 8th street on here. It shows the railroad. South of the railroad, and I should judge down about here some place.

Q Can you put your finger on the place?

A I think about there. It don't show the road. There is the railroad. The wagon road runs south.

Q On the division line between lots 637 and 638, at the point on a diagonal line, where there is a circle? Is that it?

A Yes, sir.

Q How much water was wasting there, about?

A Well, it fluctuated. Sometimes there wasn't very much and sometimes it ran 50 or 75 and sometimes 100 inches.

Q How many times did you see it wasting there? More than once?

A I have seen it a number of times.

Q When was that? About how many years ago?

A I seen it last fall, in November, December and January, and I seen it the year before last.

Q You mean the winter before this last winter?

A Yes, sir.

Q About how much did you see wasting there winter before last?

A It ran about the same, Sometimes there wasn't very much running out, and sometimes there was a big stream running out. Sometimes I should judge from 75 to 100 inches of water.

Q Was that at a time when Cucamonga Springs were short?

A Yes, sir; it was at a time when we were pumping water.

The Court: Q What was it running out of?

A Out of the cement pipe.

Q Where does that cement pipe extend from?

A I can't tell where the water came from, but the pipe line came down through Upland. I don't know where the water came from.

Q Was that pipe line connected with any of the Cucamonga systems?

A No, sir; Cucamonga don't run over there.

Q Doesn't one Cucamonga line run over above that and connect with the Ontario system?

A No, sir. Not Cucamonga. Ontario has a pipe running in north.

Q I mean a line from the Cucamonga neighborhood?

A Yes, sir.

Q Have you seen water wasting anywhere else on that west side at any time?

A I think not. I don't remember of any other place.

BY MR. HASKELL:

Q Do you know where the Eady tunnel is?

A Yes, sir.

Q Did you oversee the ciensga near the head of the Eady tunnel on the surface of the ground?

A Yes, sir.

Q When did you first see that?

A About '83.

Q Was there any water rising there at that time?

A Yes, sir.

Q About how much?

A At the San Bernardino road I should judge there was 20 or 25 inches running across the road.

Q Was there any more than one cienega at the west side of the red hill?

A Well, there was a continuous string of cienegas along there. Yes, there was more than one. There was a string of them along there.

Q Was there rising water in each and all of them?

A Yes, sir.

Q Were there any trees growing there?

A Yes, sir.

Q What kind of trees?

A Different kinds. Alders, sycamores, willows.

Q How large were the sycamores when you first saw them?

A Some of them were big trees.

Q How big?

A One there was five or six feet through.

Q When you first saw these trees in what condition were they as to being growing and vigorous?

A They were growing nice.

Q Have you seen these trees in the last year or two?

A Yes, sir.

Q In what condition are they now?

A Dead.

Q When you first saw these cienegas were there any grasses growing there?

A Yes, sir.

Q Any tules?

A Yes, sir.

Q To what extent?

A It was wet and muddy.

Q To what extent were these grasses growing there?

A They growed big.

Q How many acres of cienega was there on that side altogether?

A Well, it is pretty hard to tell in the shape it was in. Probably 30 or 40 acres of cienegas there.

Q And in the cienegas you include that was the ground in which there was water rising?

A Yes, sir.

Q What is the condition of the grasses there now?

A It is all in grain now. It is dry and it is in grain.

Q Is there any rising water on that side on the surface?

A No, sir.

Q How long since there has ceased to be any?

A Since they ran the tunnel.

Q About when was that?

A I don't remember what year they commenced to run it.

Q You don't mean the year when the tunnel was first put there?

A When it broke through the clay and got into the water strata the water quit flowing there.

Q Did they quit gradually?

A No-- Yes, they quit gradually.

Q Where was that water first taken to and distributed for irrigation when the tunnel was first completed?

A Cucamonga.

Q Were the waters commingled and used for irrigation as taken from the west side with the waters that were taken from the east side of the red hill at any point?

A I guessit was; yes.

Mr. Waters: Q This land which used to be boggy that you have described, the cienegas,-- take for instance the cienega on the east side: Were you familiar with the springs and cienegas on the east side of the red hill?

A Yes, sir.

Q When you first knew them how boggy were they?

A It was all cienega and wet springs rising all around there.

Q Could you go across it with a team?

A No. You couldn't go across on foot unless you had gum boots on.

Q How is it now?

A I have it all plowed up and put in corn and potatoes and grain.

Q So the surface is now-- A No water rises there at all.

Cross Examination.

Mr. Chapman: Q You say the waters from this Eady Tunnel are commingled with the waters of the east side: Whereabouts is it mingled?

A In the reservoir about three eighths of a mile south of the Santa Fe road, on Archibald Avenue.

Q That is, south of your place?

A Yes, sir.

Q And all of these ranches belonging to the old settlers?

A No; they can turn it in up in the red hill. No, it comes down the San Bernardino road and connects at the school house. That is the north line.

Q What do you mean by the north line?

A The north line runs in the San Bernardino road and connects at Archibald Avenue where the street is, and runs into the reservoir a couple of hundred yards, probably, west of Archibald Avenue on the San Bernardino road. That is the north connection. And the south connection is down below the Santa Fe.

Q Where does that north connection -- where does that water come from?

A It came out of the Eady tunnel.

Q Did any of the waters of the west side ever come into the old settlers' pipe?

A No, sir.

Q What time of the year 1874 was it that you crossed the Cucamonga stream and found it to be 20 feet wide and up to the hub?

A In March.

Q And about what velocity had the water there if you know?

A Oh, it ran pretty swift.

Q When was the next time that you saw that creek at the same place?

A It was in the latter part of June of the same year.

Q About how much water was there there then?

A The Vineyard Company had part of it turned out on their place; probably 100 inches; and there was probably two or three hundred inches running down the wash in June.

Q When did you next see it?

A It was about two years after that.

Q That would make it in 1876?

A Yes, sir.

Q And in what time of the year?

A I think it was September.

Q About how much water was there flowing there then?

A Part of the water was running down the wash and part running to the-- some of the old settlers got part of the water.

Q How much was flowing in the creek at that time?

A Probably 50 inches flowing in the creek. 40 or 50 inches.

Q When didyou next see it?

A In 1881.

Q What time of the year was that?

A That was in the fall again; about September.

Q About how much water was there flowing there then?

A I don't think there was any flowing down the wash. I think they had it all out.

Q About how much was there in the creek before they took it out?

A I didn't go up the creek and I didn't see none in the wash.

Q As a matter of fact, the amount that flows in the creek fluctuates very considerably? It is very different in different years, is it not?

A Well, that creek don't fluctuate very much. It hasn't fluctuated very much, only in the spring when the water is up.

Q Is the fluctuation considerable during the season from the spring to the fall?

A In the summer time?

Q Yes, sir.

A No; not very much; it didn't use to be.

Q What was the first tunneling done in that section to your knowledge?

A I don't recollect. I was there when they started the tunnel, but I don't remember what year it was done.

Q Do you know anything about what is called the Y tunnel?

A Yes, sir.

Q Do you know when that was constructed?

A No; I don't recollect the year they started. It started up right away after we made the transfer. I can go to the records and find out. Right away after we made the transfer they went to tunneling.

Q Do you know anything about any trenches that were cut in those cienegas?

A Yes, sir.

Q About when were they commenced?

A That was made about the time they were starting to tunnel; the trenches are there yet.

Q Haven't there been trenches cut there from time to time, extending over several years?

A Yes, sir.

Q Prior to the year 1900?

A Yes, sir.

Q Do you know anything about the time the Eady tunnel was commenced?

A No; I don't recollect the time.

Q Have you any idea of the length of time it has been since they began?

A No; only just right away after we made the transfer, and I don't remember the year we made the transfer.

Q Was the Eady tunnel made right away after you made the transfer?

A Shortly after

Q What transfer do you refer to?

A To what is called the Cucamonga Water Company, and we took an inch to 8 acres.

Q In lieu of the water right which you had previously claimed?

A Yes, sir.

Q So that rightaway after that was done this XII-inch pipe was laid and the "Y" tunnel was commenced? Or was the "Y" tunnel commenced before that, or do you know? This "Y" tunnel was commenced about that time, and the Eady tunnel also?

A Yes, sir.

Q And the trenches cut about the same time too?

A I think they were cutting the trenches before that time.

A Mr. Smith had charge there and he put in a concrete dam and cut some trenches in there, I think, before anything was done-- before any transfer or anything.

Q When you first began the use of water, you say it was through an open ditch?

A Yes, sir.

Q Who controlled and managed that ditch or claimed it at that time?

A What was called the Old Settlers.

Q Did they construct a ditch?

A The ditch was made before I came there. There was a ditch made there in '74.

Q Did the ditch conduct the water down to the place where the old settlers began to use it?

A Yes, sir.

Q By those old settlers do you mean the persons who held the rights to the 33.84 inches?

A Yes, sir.

Q About how long after that was the flume put in?

A I think it was in '83, in the fall,-- in August, I believe it was, in '83.

Q How long did you continue to use that flume?

A Until this pipe was put in.

Q And the pipe was laid about when? That was right after the transfer?

A Yes, sir; right after the transfer, but I don't remember the year.

Q And that pipe has been used ever since for the purpose of conducting the water over to the old settlers, where they got their proportion in the pipe?

A Yes, sir.

Q During that time until the last few years, you had the full 33.84 inches?

A Yes, sir.

Q And it was a constant flow?

A Yes, sir.

Q Used by the old settlers, I suppose?

A Yes, sir.

Q Were you using it all the time?

A We didn't use it in the winter time.

Q Did the water flow in the pipe in the winter time?

A Yes.

Q Never ceased to flow? And it was used for domestic water also?

A Yes, sir.

Q But you didn't use it for irrigation in the winter time?

A No. Nobody used much of it. It was there if they wanted to use it.

Q But as a matter of fact you didn't use it?

A Not in the winter time.

Q This waste water which you saw, what time of the year did you say that was?

A In '95, I think.

Q What did you mean by waste water? What was it that caused you to regard it as waste water?

A The water that I speak of north of the San Bernardino

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road came from the sand box and flowed down to the road, and at that time a part went east and a part went west, in the culverts, and down in the brush?

Q. Did you know the cause of it?

A No, sir.

Q You don't know where it came from?

A It came from the sand box just above the road.

Q Whereabouts was it that you saw this waste water?

A I should judge it was about half a mile west of the Eady tunnel.

Q From the mouth of the Eady tunnel ?

A Yes, sir.

Q Where was the sand box?

A Right above; probably 100 yards above the road.

Q How was the water conducted from the sand box to the place where you saw the waste water? Or was the waste water coming out of the sand box?

A Coming out of the sand box.

Q Then where did it go to?

A Down in the brush; down into the wash.

Q Wasn't conducted into any sort of a conduit?

A No, sir.

Q You say you don't know the cause of it?

A No, sir.

Q You say you saw it several different times?

A Yes, sir.

Q At what intervals? Over about what space of time was it that you witnessed this waste water flowing?

A Two orthree months.

Q And how often did you see it in that two or three months?

A Sometimes I was over there four or five or six times a month and sometimes not more than two or three times.

Q During this two or three months that you are speaking of?

A In each month.

Q And it was flowing continuously?

A It was flowing when I went along.

Q But in varying quantities?

A Right down south of the track-- I didn't see much difference in it north of the San Bernardino road. That place that I spoke of south of the San Bernardino road, sometimes there wasn't any water flowing, sometimes a small stream flowing and sometimes a big stream flowing .

Q North of the San Bernardino road you say it was different?

A There was a big stream flowing there.

Q But it was different from that there was on the south side?

A Yes, sir.

Q Did the waste water which came from the south side and the water which came on the north side come from the same place?

A I couldn't tell you.

Q Did you know where either one came from?

A No, sir.

Q I thought you said it came from the sand box?

A Yes; but I don't know where it came from.

Q Did the watercome from the same sand box?

A I didn't say so.

Q But did it?

A I think on the north side of the San Bernardino road it came out of the sand box, and that on the south side of the railroad came out of the concrete pipe.

Q It was coming then from two different places?

A Yes, sir; from two different places.

Q Didn't you testify in your direct examination that some times there was a very little water and sometimes quite a little stream,-- from 50 to 75 and , you thought, possibly sometimes 100 inches?

A Yes, sir; I should think so; sometimes a big stream.

Q When you were talking about sometimes there was very little and sometimes a great deal, what did you refer to?

A South of the railroad.

Q How was it north of the railroad?

A When it wasn't raining it seemed to be running about the same.

Q About how much?

A I should judge a couple of hundred inches.

Q Do you mean at the time that you saw the waste water there, from 200 to 275 or 300 inches,-- or did the 200 inches include--

A There was probably from 150 to 200 inches running out north of the San Bernardino road.

Q And then south of the San Bernardino road the water that flowed out was not a part of the stream that flowed out of the north side?

A I don't know where the water came from.

Q You don't know where either one of them came from original-

ly?

A No, sir; I can't say where either one of them came from.

Q What I am trying to get at is did the water flowing out at the north side flow across the road on to the south side, and as the water that you saw on the south side water that came out of the sand box on the north side of the road?

A The two places are over a mile apart. The one on the north side of the road divided and went to the bridges and down into the brush. The one on the south side of the railroad track ran down into the brush.

Q You say the two points, the sandbox and the pipe from which the water was issuing, was over a mile apart?

A I guess it is more than a mile apart; a mile and a half, I guess.

Q You didn't look to see what was the cause of the water being so much at some times when it was not so at other times?

A No, sir.

Q Did you ever say anything about it at the time?

A Yes, sir.

Q Did you make any complaint about it?

A I didn't enter no complaint.

Q It was not affecting you personally?

A Only last fall, I spoke about it then. That was the only time I made any statement about it.

Q It was not affecting you personally, was it?

Mr. Haskell: I object to that as calling for a conclusion of the witness.

The Court: It might and it might not.

Mr. Haskell: We will withdraw the objection.

Mr. Chapman: I guess you have done all the harm you wanted to.

Q You didn't take the trouble to investigate that and see where it came from, or anything about it?

A I know where it came from through the words of the zanjero, if you want to know. He told me where the water came from and where it went to.

Q Did he tell you how it happened to be going t ere?

A Yes, sir.

Q That was in the fall of 1906 or '5?

A He told me that was the waste ditch, and when they didn't use the water they turned it down in the brush.

Q Then you didknow how it happened there?

A Only from what he told me.

Q That, I believe you said, was in the fall of 1906 or 1905?

A '5 and '6.

Q You never observed it before?

A Yes, sir; there has been water running out on the south side of the track sometimes before in the winter time.

Q Do you know when the bulkhead was put in the Eady tunnel?

A I think in January.

Q Last?

A Yes, sir.

Q Before that the water of that tunnel ran out all the time?

A It ran out-- not all the time; there was water running out there.

Q What was to prevent its running out from the mouth of the tunnel, whether it went to waste or anything else?

A It ran out of the tunnel; yes.

Q And the bulkhead was put in to prevent its running out?

A Yes, sir.

Q And up to that time there was no means to prevent it?

A There was none running to waste then.

Q I am talking about its running out of the tunnel-- out of the mouth?

A I haven't been up to the tunnel since then.

Q I mean before that. Before the bulkhead was put in they had no way of preventing it running out of the tunnel?

A No, sir.

Q A great deal of the time they were using it all, I suppose?

A Yes.

Q Do you know where the Blackburn Addition, so called, is?

A Down south of the Southern Pacific.

Q Do you know as a fact that part of the waters were being used down there and carried there in a pipe line?

A I know it was carried down there in pipe lines.

Q Do you know by what pipe line it is carried down? What manages or controls it? Isn't it the Cucamonga Water Company?

A The Cucamonga Water Company made the pipe lines down there.

Q Do you know who it was or what corporation it was that constructed the Eady tunnel in the first place?

A It is called the Cucamonga Water Company, under Mr. Lynch's administration, and Wright's.

Q Did the Cucamonga Fruit Land Company have anything to do with it originally? A Yes, sir.

Re-Direct Examination.

Mr. Haswell: Q. Do you know where this sand box is that you have spoken of in reference to the pipe line of the San Antonio Water Company leading westward from the Eady tunnel?

A. It is on the pipe line; that is where the pipe line runs.

Q. It was an opening in the pipe line of the San Antonio Water Company, was it?

A. Yes, sir.

Q. You have known the Cucamonga Springs since 1874?

A. I never was up to the springs; I crossed the road then.

Q. You have known them since '73?

A. Yes.

Q. Where are those springs located with reference to the red hill?

A. On the east side of the red hill.

Q. Any on the west?

A. Yes.

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E. T. Wright.

E. T. WRIGHT, heretofore sworn and examined, being recalled for plaintiffs, testified as follows:

Direct Examination.

Mr. Britt: Q. Look at this tabulation Exhibit 3. In the column under the [illegible] "Observer" at the [illegible] of this tabulation, at the date April 30, 1[illegible], the name E.T. Wright appears as the observer of various phenomena, which from the testimony already introduced I am prepared to be

recorded on this tabulation. Did you make observations or measurements of water and measurements of wells which are recorded on this tabulation, at that time?

A Yes, sir.

Q And does this tabulation show correctly in the several columns appearing here the results of measurements which you made at the several dates following your name, commencing with April 20, 1904?

A Yes, sir.

Q At various points in the same column under the head of "Observer" are the initials E.T.W. and J.O.M. Do you know what those signify?

A E.T.W. means E.T.Wright, and J.O.M. means J.O. Marsh.

Q And E.T.W. are your own initials?

A BYes, sir.

Q Indicating that you joined with Mr. Marsh in making the measurements which are exhibited on this tabulation?

A Yes, sir; we took them separately, but we were both present.

Q At sundry points following April 20,or after April 20,1904, your initials appear and sometimes in connection with other observers.State whether the observations which you have made have been placed on this tabulation correctly, or, rather, the results of the observations and measurements?

A The results of them have; yes, sir.

Q The last entry in which your name appears is under date April 30, 1907, Wright, Purcell and Roebig. The measurements which follow that date and those names as observers, are correctly shown on this tabulation, are they?A Yes, sir.

Mr. Britt: In this connection we offer the rest of this exhibit 3, so marked. The measurements made by Mr. Wright, and by him in conjunction with others, the figures shown in the appropriate columns.

A copy of said exhibit may be found at the end of the transcript of this day's proceedings, to-wit, at page __)

Cross Examination.

Mr. Chapman: Q Have you put on that sheet all the measurements that you made?

A I think so, Mr. Chapman. The one list of wells that we are measuring regularly, I think I put them all on the sheet.

Q Did you measure other wells that you didn't put on the sheet?

A No, sir; no other wells at all. We measured one little weir that we call 8-1/2 or 8 a, which is at the old settlers' box, which should represent one-half of the water of the creek, and we never put it down in the tabulation because it should be just one-half of weir no. 8, and we didn't keep any track of it on the list.

Q You mean where they received the water?

A Yes, sir; on Hellman Avenue from the 22 inch pipe.

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S. G. COUSINS.

S. G. Cousins, heretofore sworn and examined, being recalled by Intervenors, testified as follows:

Direct Examination.

Mr. Haskell: Q Have you examined the transcript of your testimony as made by the official reporter?

A Yes, sir.

Q Do you find any correction in that testimony that you gave here that you desire to correct, as it appears in the transcript?

A Yes, sir.

Q You may do so now, beginning on page 554.

A Between lines 7 and 8 there should be another measurement. April 4, 1907, elevation , 1334.94.

On page 560, line 11, it should read 111-1/2 or 111.5 instead of 133.

Q On page 544 line 2 it should read "Haskell well" instead of well No. 5.

On page 545, line 10, it should read 1369.25 instead of 1368.25.

--o--

S. P. KINCAID.

S. P. KINCAID, a witness produced by plaintiffs, being first duly sworn, testified as follows:

Direct Examination.

Mr. Waters: Q Where do you live?

A Cucamonga.

Q How old are you?

A Thirty-eight.

Q How long have you been acquainted with that section of country?

A All that time, more or less.

Q How long have you been acquainted with or familiar with the place called Cucamonga Springs or Cienega?

A I have been acquainted with it ever since I could ride horseback. I suppose that was about when I was six or seven years old, I commenced riding.

Q Has that water been taken out for irrigation ever since you can remember?

A Yes, sir; on both sides, I guess, ever since I can remember. They took it out on both sides.

Q Now that part of the water of that section which is called Cucamonga Springs and the Cucamonga Cienega Springs stream, that flows on the east side of the red hill, where was that used when you first knew it, for irrigation?

A Well, it was used at the old winery; that big open ditch-- I suppose that went to the old settlers at that time; I wasn't very well acquainted at that time, where it went to.

Q One ditch went to the vineyard?

A Yes, sir; one ditch went to the winery.

Q And the other went easterly?

A Northerly, in a kind of an o val shape.

Q For what purpose was that water used?

A For irrigation.

Q Was it used every year?

A Yes, sir.

Q When did you first become familiar with the water of that stream with a view to knowing anything about the quantity of water that flowed in the stream usually?

A On which side?

Q The east side, I am talking about.

A About what year?

A It must have been about '88.

Q In what kind of an aqueduct was the water used when you first knew it?

A It was a pipe line at that time; it was all piped.

Q Did you ever use any of that water for irrigation?

A Yes, sir.

Q When?

A In about '87.

Q At what place?

A On what we called the old homestead; mother's ranch.

Q Where is that place situated?

A That is right between Hellman and Archibald. It joins the Santa Fe track on the south.

Q How many acres are there in that place?

A 24.

Q And what quantity of water did you have in use on the

place?

A We got the full flow of 33-- pretty near 34 inches. I don't know how near we got it, but once a month, we got two heads, and for the following month we got three heads, and I think we got a little more than what naturally belonged to us.

Q Was that part of what was termed the old settlers water right?

A Yes, sir.

Q You took it in turns among eachother?

A Yes, sir.

Q And you divided it in time rather than in quantity? That is, you dian't get a little continuous stream?

A No.

Q You got it in heads?

A Yes, sir.

The Court: Q Was it used from the start?

A Ever since I can remember.

Mr. Waters: Q During these years that you have known that water was it necessary?

A Necessary for water?

A Yes, sir.

A Yes, sir.

Q Those lands require water to make profitable crops?

A Yes, sir; you couldn't raise an orange there without water.

Q How was it with respect to whether you used the water in the winter as well as summer?

A You know, we used that water as domestic, and the

Cucamonga Water Company at that time after I went there,-- they had to have part of the water, so we always got our 33 or 34 inches, winter and summer, We had to make use of it and had many scraps over it to see who would take the day when it came around. We had to take our water, rain or shine, each one of us, except when it flooded over and closed up the sand box. It might be a week at a time to clean it out so that the water would come again.

Q You did use it for domestic use all the winter?

A Yes, sir.

Q And you kept it running all the time?

A Yes, sir. In the last few years I had to make other arrangements. It got so short that I had to buy some stock.

Q I am talking about before the shortage occurred.

A We all used it.

Q When was the first time the first shortage occurred in that 33.84 inches?

A I think it commenced to shorten in about 1.01 or '2; along about that time.

Q Did that shortage operate to the injury of those people?

A It did, up to the time we had to put in pumping plants. to get our water.

Q This water was gravity water that you had? A Yes, sir.

Q And that was without expense? A. A small expense for zanjero's fees.

Q You did get another supply after this gave out? A Yes.

Q Was that also without expense or with expense?

A Very expensive at that time.

Q Has it always been expensive since you had to pump?

A Yes, sir.

Q Now this 31.84 inches that has flowed in this pipe line, from what source has it been obtained, from what stream?

A Well, from the Cucamonga Springs, it would be,-- of course, out water would be right north of the old Park Hotel.

Q Was that the source during all the time up to the time you had to go to pumping?

A I worked for theCucamonga Water Company-- when our water was short, a little short, they used to take some water to make up for us, from the Y tunnel, and bought it down and turned it into the box.

Q Whenever the stream did get low and there was water in the Y tunnel, they would supply the deficiency from the Y tunnel?

A Yes, sir. I worked for the Company during that time.

Q What years were those?

A Thosewere about 1891.

Q That is some 16 years ago?

A Yes, sir.

Q The Y tunnel is situated in the ciemgus, up above the point of diversion from the stream?

A Right north of the winery.

Q What have you observed if anything, relative to the decrease in the flow of waters out of Cucamonga Springs, into the Cucamonga stream, if it has been natural or decreased?

A Of course there has been a big decrease in it, in the last six or seven years.

Q Have you noticed that that has been coincident with or happening in conjunction with something else that happened at the same time in the neighborhood?

A Just in my own mind, of course--

Q I am not talking about your mind, or your opinion. I am talking about your observation: Was the decrease of water in this stream coincident with the happening of anything else, any other event, about there?

A Of course, those tunnels and things opened in there, were bound to decrease the water.

Q I am asking you if the two things did happen together, that is all I am asking you. Did the water of the stream decrease coincident with the happening of anything else? Did it or did it not?

A Yes, sir.

Q Did the water ever decrease materially before these things happened?

A No, sir.

Q You have had dry seasons before, haven't you, that is to say, years when there was a light rainfall?

A Yes, sir.

Q Did that stream ever decrease to flow as little as 33 inches before that?

A Not as long as I could remember.

Q About how low had you ever seen the stream in the driest season before?

A You mean in the wash there?

Q That is what I mean. How low had you ever seen it before?

A Of course, that is a hard question, but just to take and look at it, I don't think I ever saw less than 150 inches in there.

Q Have you observed the difference in the appearance of the

surface there about those springs, since these various wells and tunnels and pumps have been constructed?

A Yes, sir.

Q Just describe to us what change there is.

A You take it in '84-- when we first came down in '82, we couldn't walk over the springs, lots of places it was so swampy you couldn't walk over it, and it was wet and tuleys and grass there; Now Mr. Maddock and I have had grain in that ground where it was so swampy you couldn't get a horse over it.

Q Did that swampy appearance prevail in the dry season of those other years?

A No, sir.

Q I say in those other years, did that swampy appearance exist, even in the dry season?

A Oh, yes; it always did; it was swampy.

Q Did it ever dry up until this water development was made?

A No, sir.

Q Before these tunnels were begun and these shafts were dug and the pumps put in were there any springs anywhere on the red hill itself?

A Do you mean right on top?

Q Yes, sir.

A. Well, not square on top of it, no, sir; I never saw any.

Q Were they close to the top?

A Yes, sir; those springs on the east side-- on the west side of the wash as you go up-- it ran pretty near two thirds of the way up the hill all along.

Q And those springs extended up on the side hill?

A Yes, sir; quite a ways.

Q Up to about what distance from the top of the hill?

A I shoud judge in places two-thirds of the way up.

Q Did the water flow out of those springs anywhere?

A Yes, sir; all along.

Q And it flowed down into what?

A In to the main channel of the wash.

Q And formed a tributary to the stream?

A Yes, sir.

Q When did they quit running or quit being wet?

A Well, of course now, you take it eight years ago-- nine years ago there was quite a good deal of water there, but now it is just as dry as a bone; of course, I never paid any attention to it just when they quit.

Q You farmed on the west side, some time ago?

A Yes, sir.

Q In what way?

A I raised potatoes.

Q How many seasons?

A One season.

Q Did you irrigate?

A Yes, sir.

Q With what water?

A With the west side water.

Q From where did it come?

A From the springs.

Q Natural springs?

A Yes, sir.

Q How many acres of potatoes did you plant?

A Well, in the spring-- I had morein the fall than I did in the spring. Of course, we raised two crops a year there.

Q About how many acres did you cultivate there?

A I suppo se about 8.

Q How many inches of water did you use as well as you can tell?

A Well, as near as I can tell I used about 30 inches.

Q What year was that or years?

A That was in '84 I think.

Q Have you observed anything of the running to waste of any water between the Red Hill and Upland at any time?

A Well, yes; it has been about on the San Bernardino road, w hat we call the San Bernardino road; I don't think I have noticed any water running there in the last year but two years ago there was quite a stream ran out there pretty near all winter.

Q What did that run out of?

A Out of a sand box about 200 yards above the San Bernardino road.

Q How far west of the mouth of the Eady tunnel is that?

A I should judge that is about half a mile.

Q Do you know what pipe line it came out of?

A Yes, sir.

Q What pipe line was it?

A It came out of that pipe line that runs over to the Eady tunnel.

Q That runs from the Eady tunnel southwesterly?

A It ran easterly from the sand box.

Q I am talking about the Eady tunnel; did it run westerly from the Eady tunnel?

A Yes, sir; it ran westerly.

Q That was the pipe line the water was wasting out of?

A Yes, sir.

Q You say it wasted out of a sand box?

A Yes, sir.

Q Where did it run from the sand box?

A Pretty near due south and until it hit the road and it divided; the stream went each way; one went to the big main wash and the little stream went back into a little wash there.

Q And thence the water would extend down the wash, when it struck the wash, southerly?

A Yes, sir.

Q About what quantity of water did you see this wasting?

A I should judge-- of course when I would go along with a load of lemons, off and on-- I should judge 75 or 100 inches.

Q Did you remonstrate or talk with anybody about it?, that had charge of it?

A No, sir.

Q I will ask you if the time when you saw this water wasting, if the water of Cucamonga Springs stream was deficient or if it was up to the normal?

A Well, that would be in the winter time--

Q Was it defieient or was it up to its normal flow? Has the Cucamonga stream been up to its normal flow in the last 2 years?

A Oh, no.

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Q Well, that is what I am asking you.

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W. J. KINCAID.

W. J. KINCAID, a witness previously sworn, being recalled, testified as follows:-

Direct Examination.

Mr. Britt: Q I think you have already testified that you were acquainted with the cienegas and moist lands up above the Mountain View Hotel and below the Base Line and about the Cucamonga Springs and around the Cucamonga stream: You are acquainted with that land?

A Yes, sir.

Q About how much moist land was there before the drying up of the same 6 or 7 years ago, suitable for grazing purposes, pasturage, but too wet for cultivation?

A I should think on the east side of the Red Hill--

Q Yes, that is what I am talking about, and within section 4.

A I should judge there would be about 150 acres.

Q Has that land dried out so that it was no longer moist to your knowledge?

A Yes, sir.

Mr. Gregg: Objected to as leading.

Mr. Britt: The objection iswell taken.

Q Do you know about the present condition of that land as compared to what it was previous to 1900?

A All of the land on the east side of the Red Hill is now being cultivated to grain.

Q State whether it is as good for pasturage, growth of

grass, pasturage plants, as it was previous to 1900?

Mr. Gregg: Objected to as leading.

The Court. The objection is overruled.

A That piece of land previous to I should say 1886 was considered one of the best grazing pieces of land in the valley; in fact it produced a great deal of grass around the Cucamonga Springs and I would think that those cienegas at that time would support during the dry summer months 300 head of stock.

Q Grass grew?

A Yes, sir; regular cienega grass.

Q I think you said that was prior to 1886?

A Yes, sir; it was all practically pasture land up to that time.

Q What about 1899 and 1900?

A Well, in 1900 it began to dry up; pretty well dried up in 1900. From 1900 through to 1902 it was practically absolutely dried up. Well, I might qualify that by saying there was a few inches of water; it didn't amount to much.

Q Did that land include the swamps themselves from which the water ran?

A Yes, sir; that included the 110 acres; that would include all of the swamp land, yes, sir; it would include all of it; then there was moist land around the swamps I should think 50 or 60 acres more laying between the Y tunnel and the main springs on the east. There was a body of land laying in there --- the land that the Chinese garden.

The Court: Q How did the value of that land compare with the land in its previously existing condition, the pasturage?

How did it compare with the conditions since maintained when it was been farmed?

A Do I understand by your question do you mean whether that land was worth more for pasturage?

Q Irrespective of what it was used for, the question is whether those producing crops were of greater or less value under previous conditions than under the conditions which now exist?

A Well, it was not producing anything but grass until it dried up.

Q Well, that had a value, had it not?

A Yes, sir; it had a pasturage value and in those days it was considered very valuable. In fact we had to have it.

Q Was it more valuable for pasturage than it is now?

A I should say yes, and I would qualify my answer by saying that in those days it was used as pasturage and there was probably 2' or 300 head of cattle and during the summer months you see all those cattle practically lived on those springs.

Q If it were still in the same condition you could use it still?

A We haven't anything of the kind now there.

Q Beef is worth more now than it was then, isn't it?

A Yes, sir.

Q Are you able to make any comparison of the land under the previous condition and its present condition?

Mr. Britt: I suppose that means whether the land was more valuable to pasture cattle on or to grow grain?

The Court. I suppose that is another way to state it.

A I should say yes, sir; very much more so.

The Court: Q Which is it?

A For grazing cattle forpasturage.

Q More valuable than under the present conditions?

A Oh, yes; yes, indeed.

Cross Examination.

Mr. Joliffe: Q Do you say that in the year 1886 that there was about 150 acres of this grazing land and some other moist lands around near there?

A Yes, sir.

Q Now how was that about ten years after that, say about 1896? Was there that amount of land there at that time in the same condition?

A No; I don't think there was quite so much.

Q Not quite so much. It had commenced to dry out by that time, had it?

A Yes, sir. I should say yes, sir, and qualify my answer by saying that the cuts, the deep cuts and the tunnels that they had made had a tendency to dry up the upper parts of the cienegas.

Q Those cuts and tunnels are still there, are they not?

A Yes, sir.

The Court: Q Do you mean the Y tunnel?

A The Y tunnel.

Mr. Joliffe: Q Do you know about the amount of water that was taken out of those cienegas by means of cuts and tunnels in the years '86 to '96?

A I think on the Y tunnel it would probably average from '86 to '96 I should say 150 inches.

Q And about how much more did those cuts produce that you have spoken of?

A Well, that included the cuts at the Y tunnel.

Q And during the time that the water was running from those cuts and tunnels how was the water flowing from the springs at that time?

A Do you mean particularly at the Y tunnel or the springs?

Q I mean the Cucamonga Springs that rose in the creek about the roots of an oak tree somewhere. I believe you testified about it a few days a go.

A Well, the water on the east side of the Red Hill and the spring, they were practically the same up to 1896, I should judge.

Q Then there was flowing from those springs in addition to what was flowing from the Y tunnel from 100 to 200 inches usually and sometimes more than 200?

A Yes, sir; I should say so.

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W. T. LEEKE.

W. T. LEEKE, a witness previously sworn, being recalled by plaintiffs, testified as follows:

Direct Examination.

Mr. Waters: Q Mr. Leeke, were you informed in November of 1905 that water was running to waste from the pipe lines of your company which took water from the Eady tunnel, that water was running to waste down on the plains?

A It is quite possible; I do not recall at this time such notification.

Q Didn't your attorneys Messrs. Otis, Gregg & Surr inform

you that I had written for the Old Settlers Water Company a letter to them asking them to call your attention to the matter and have it corrected?

A It is quite possible.

Q Have you no remembrance of it at all?

A I remember something of the kind, but I can't give the dates.

Q I am not asking you for the dates. Do you remember the occurrence that you did receive notice of such complaint in November, 1905, or about that time?

A I have some recollection of such notice, but I can't place the date.

Do you have a recollection of the fact that water was so running to waste and that your attention was called to it?

A In the winter season, yes, sir; I know that the water was running to waste.

Q In November 1905 or in the fall of 1905?

A Well, I can't state at what time it was running to waste. I don't remember the conditions of our irrigating system at that date; but I know when the rains had saturated the earth and there was plenty of water everywhere without irrigation, that water from that tunnel did run to waste; there is no question about that.

Q Do you mean to say to us here that from your knowledge of the subject that you thought that was sufficient excuse, that the rains had come and wet the surface, and that consequently you could waste the streams?

A I desire to say that we regret it that water should run to waste from the Cucamonga tunnel and that we had conferences

with the Cucamonga Water Company over a period of several years back, expressing to them the desire that they should co-operate with us in closing that tunnel and we kept up such negotiations until this last winter; and then after a very urgent request on our part they consented that we should go on and bulkhead that tunnel.

Q Now, Mr. Leeke, isn't it a fact that notwithstanding the complaint was made to you late in 1905 that you were running this water to waste, and notwithstanding you didnot do anything about it that winter or season at all, but continued to run it to waste, isn't it a fact that you didn't do anything at all until the district attorney of this county threatened you with prosecution if you didn't quit it and wasn't it then for the first time that you did do anything toward stopping it?

A I can't agree with your question.

Q Just answer the question. I don't care whether you agree with it or not.

A Your question involves several points and I do not care to say yes or no to a question that involves several points and a yes or no might not be correct.

Q You may answer my question, if you please. Have you finished? If so, I will ask another.

A I desire to answer that question.

Q Do so.

A We began negotiating with the Cucamonga people for the closing of that tunnel several years ago. I remember well that we did receive a communication from the district attorney. I answered that communication something in this wise:

Q That was in writing?

A Yes, sir.

Q I will show it to you and ask you if this is your signature?

A Yes, sir; that is my signature.

Mr. Waters: We offer it in evidence..

Letter marked Plaintiffs' Exhibit 10 and read in evidence.

Q When did you begin that bulkhead?

A Shortly after the close of the irrigating season-- early winter-- I don't remember the date.

Q You had begun it before the district attorney wrote that letter?

A Most certainly; it was partly completed.

Q Did your attorneys Messrs. Otis Gray & Sure send you the letter which I wrote to them in 1905, November 29th, 1905?

A I presume so. My recollection is a little faint on the subject.

Q Will you please produce that letter if you have it?

A Certainly, I will be glad to do so.

Q At the next sitting of the Court please produce it. Look for it and if you can't find it possibly we may have a copy. I think there is no question but that we have it in our files if such a letter was written.

Q When did you first begin bulkheading that tunnel?

A I can't give you the date, but I can bring you the date from our records.

Q Wasn't it last fall?

A Yes, sir; or early winter.

Q In the fall of 1906?

A Yes, sir.

Q Didn't that water run all during the year 1906, for that year 1906?

A Most certainly, it ran through the pipes; yes, sir.

Q And during that time did you know that the Cucamonga Springs stream was below normal and flowing a very few inches of water?

A Yes, sir.

Q And you knew that the waterlevel was continually lowering, did you not, in the sources of water supply in that part of the country?

A During what period?

Q The year 1906.

A No, sir; I didn't know the waterplane was lowering continually during 1906.

Q You didn't know that?

A No, sir.

Q Didn't you know it had been lowered for several years prior to 1905?

A Yes, sir.

Q And notwithstanding that fact you ran the water out of this tunnel for how many winters when you were not using it for any beneficial purpose?

Mr. Chapman: We object to the question as irrelevant and immaterial. I don't see what relevancy the question could have.

The Court: Overruled.

A During seasons of rainfall and at the conclusion of irrigation generally a portion of that water went to waste. A portion of it, if I remember correctly, has been used for the domestic supply of the towns of Upland and Ontario.

Mr. Haskell: Q Was any water from the Eddy tunnel run to Upland?

A It runs through Upland.

Mr. Waters: Q Have you got those contracts that I called for the other day?

A Yes, sir; this is a general contract that I referred to the other day.

Q This contract has never been recorded has it?

A The contract has been recorded in Los Angeles County.; I presume in this county; I am not sure; I am quite sure it was recorded in Los Angeles county. There were several copies and I presume the recorded copy is not this one.

Q What other one did you bring, Mr. Leeke?

A I have the trust deed mentioned in that contract and pertaining to it.

Q You will bring those with you at the next session of the court.

Mr. Britt: And also this map, this large map that is upon the board.

Here the Court takes a recess until Wednesday , June the 12th, 1907, at ten o'clock A. M.

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IN THE

Superior Court

OF THE

County of San Bernardino

State of California

Cucamonga Vineyard Co., Plaintiff vs. San Antonio Water Co., Defendant	)	Vol. IX.

INDEX.

I. BENJAMIN, Official Reporter

Friday, January 17, 1908. Ninth Day.

J. B. FOX.

J. B. FOX, heretofore sworn and examined, being recalled by plaintiff, testified as follows:

Direct Examination.

Mr. Waters: Q. Where do you live? A.

A. Cucamonga.

Q. How long have you lived there?

A. Four years and a half.

Q. Were you familiar with that section of the country before you went there to reside?

A. No, sir.

Q. Have you lived there continuously since four years and a half ago?

A. Yes, sir.

Q. What is your occupation there?

A. Orange grower.

Q. Where is your place situated?

A. Right in the town of Cucamonga, you might say, on the north side of San Bernardino Avenue.

Q. Can you give the number of the lot or subdivision which your place comprises?

A. I am in section 3. I can't give just the legal subdivision off hand.

Q. And the place is known as what?

A. Known as the old Southworth place. He owned it for fifteen years before I did.

Q. How many acres?

A. Twenty.

Q. To what is that twenty acres set?

A. All to orange trees.

Q. About how old are the trees?

A. They range from six to eighteen years.

Q. And what is the area of the plant?

A. Twenty acres.

Q. Is it all set to trees?

A. Yes, sir; solid to oranges.

Q. And does it require irrigation?

A. Yes, sir.

Q. Has it been irrigated?

A. Yes, sir.

Q. From what source?

A. From the Cucamonga Springs and a well that the Old Settlers' Water Company owns.

Q. When did you first become familiar with the Cucamonga Springs?

A. In the spring of 1904.

Q. Have you during the time you have so lived there-- Have you at all had anything to do with the management of the affairs of any association of water owners there, or claimants of water?

A. I have had the management of the Old Settlers' Water Company's affairs since the spring of 1904, up to the first of this year.

Q. In what capacity?

A. As president and manager of the company, and one of the directors.

Q. Have you had occasion to, or have you ever made measure-

ments of the water issuing from the springs or the source called the Cucamonga Springs?

A. Yes, sir.

Q. And have you kept any record of any observations or measurements there?

A. I haven't kept any memoranda since about December 23, 1906.

Q. Did you keep memoranda covering any dates or times?

A. Yes, sir.

Q. Covering what times?

A. Since December, 1906.

Q. Since then or before then?

A. Since then.

Q. Did you make any measurements or gaugings of the water before that at all?

A. I did. I measured the spring water.

Q. And you say you kept no memoranda of it?

A. I didn't make any memorandum of it.

Q. When was the first time you ever observed that stream?

A. It was in 1903, I saw it first. I just went and looked at it.

Q. Do you know anything about estimating quantities of water flowing?

A. I have some idea and have had for some years. I had it in Ventura county.

Q. Have you had any experience in handling streams of irrigating waters or water for any other purposes?

A. Not till I came to Cucamonga, to speak of.

Q. Have you since then?

A. I knew what an inch of water was all right, and the amount of it, and the size of the stream.

Q. When you saw that stream in 1903 what was flowing in it about?

A. In 1903 there was about from 12 to 14 inches in the spring, and it gradually went down through the summer time.

Q. What did it go down to?

A. To about from 4 to 6 inches.

Q. What time of the year was that?

A. It was July and August; about August,.

Q. Of what year?

A. 1903.

Q. Go right along and describe it. From that time on what you observed of it,-- in your own way.

A. I observed it in 1905 a number of times, because that spring water runs right past my house and runs right to the corner of my place, and I have opportunities to see it every week or so during 1905, as to the amount, and then in 1904 I took charge of this water and went up to the springs and ran a drain ditch and built a bulkhead and dam and turned the water into the ditches that I dug. There was about 16 inches of water in the spring. About 14 inches of water running in the creek, I should judge. I dug this drain ditch and developed probably about 6 inches. But that summer a great deal of water was pumped from the wells above our springs.

Q. What wells?

A. All the wells in the country were pumping very heavily. That is the year they pumped so heavy. Along in the summer

time, in July, the creek stopped running entirely. After the last half of July and all of August the water didn't get down to this ditch that I dug, where the water had always been taken out, and didn't get within five ~~fxxx af it~~ hundred feet of it; but there still ran in the pipe line about four inches in the driest time, and that is the water that I developed. It started about 290 feet and the ditch was 12 feet deep where I ran up alongside of the creek bed.

Q. And there came into this ditch about four inches of water?

A. Yes, sir; that was the amount in the driest time of the year.

Q. Go right along and describe the condition.

A. It has increased grad ally in the fall, and in the winter it increased a little; but the next spring there was no more water in the spring of 1905 than in the spring of 1904, although we had heavy rains. There was possibly a little more, but not much more. By the time we commenced to irrigate there was only about half the amount of water we had the season before.

Q. About four inches you say?

A. No; from 16 to 18 inches.

Q. And in the irrigating season of that year what did it go to?

A. That ran down in the summer to 6 or 8 inches.

Q. And continued up to what time?

A. Up till the rains came the next winter.

Q. Then what did it go to?

A. Well, it didn't increase much the next year.

Q. You will have to give these years to us. What was the

next year?

Mr. Chapman: You have reached 1906.

A. I would state that in 1905, in the fall of 1905, when the water didn't increase after a wet year, I began to look around to see why the water hadn't raised in our springs, as it did in other springs and streams.

Q. Without giving your opinion about it, just state the coincidences which you observed.

A. I observed that after the first wet year the water didn't come back in the springs as we all expected it would, and I began to look to see why.

Q. What did you find to be the coincidences?

A. In looking around I found that in the near neighborhood that there was a big volume of water. I had seen that the year before running to waste.

Q. Where?

A. To the west of the red hills, running across San Bernardino Avenue, about half a mile west of the red hill. I didn't know at that time where it came from. But in 1905, in November, I followed this water up to see where it came from and found it came from these wells and tunnels on the west side of the red hills; and when I found about 100 inches of water running to waste, I immediately came down and notified Mr. Waters that a big body of water was running to waste and had been in previous years, and I asked Mr. Waters to write to the San Antonio Water Company, which he did, and I have a copy of the letter.

Q. Go right on and state what you observed down to the present time.

A. After all that, after writing that letter, the San Antonio people started in to sink a shaft in this tunnel but there was nothing done that year. They finally gave up that shaft and started a new one; but there was nothing done towards checking the flow of the water.

Q. You state that that water was running to waste. Just state the facts.

A. It ran to waste in 1904 and '5.

Q. Where did it run to waste?

A. In the rocks and some brush south of San Bernardino Avenue.

Q. At what point?

A. To the west of the red hill about half a mile.

Q. And between there and what other place, running north and south?

A. It ran south from what is known as the Stowell sandbox about half a mile west of the red hill.

Q. Thence where did it run to?

A. South of there through the rock and gravel and thence into the stony flat south of San Bernardino Avenue.

Q. Proceed and state what you observed.

A. When the water was turned loose running to waste in 1906 I came down again to see about it, and I met the District Attorney and he wrote to those parties.

Q. Wrote to what parties?

A. To the San Antonio Water Company; to see if we couldn't stop the waste of the water.

Q. What happened next?

A. The parties then made an effort and put in a bulkhead

and closed down the bulkhead.

Q. Where did they put in the bulkhead?

A. They put in the bulkhead in the Eady tunnel on the west side of the red hills.

Q. The bulkhead which has been described heretofore in the evidence? Somebody described it in the evidence.

A. I think it was spoken of in the other session.

The Court: Q. You say the parties did it: Whom do you mean?

A. The San Antonio Water Company; the Cucamonga Water Company may be interested with them, but I don't know. Any way, the San Antonio Water Company have charge of this work.

Q. You mean the San Antonio Water Company did this work?

A. Yes, sir; that is what I have been told.

Mr. Waters: Q. What did you observe after this bulkhead was put in?

A. The bulkhead was put in in January, 1906, and in December before that I went with Mr. Cousins and we measured all those wells and springs and made a record.

Q. It is in the testimony?

A. Yes, sir.

Q. How do you state the fact to be?

A. I was with Mr. Cousins when he made all those measurements and surveys and so forth, and all his testimony given there, I believe, after that relating between December 25 of last year and up till the present time, I have been with Mr. Cousins.

Mr. Chapman: Do you mean last year? 1907?

A. December, 1906, and all of 1907.

Q. Go on and state what you have observed coincident with the work in that Kady tunnel in the way of bulkheading.

A. We measured the Cucamonga Springs and a number of these wells on December 23.

Q. Of what year?

A. 1906.

Q. Have you made a memorandum of that?

A. I have.

Q. Produce it.

A. December 23, 1906, we first measured the water at the sandbox. I don't know the number of that weir, but it is right near the brick hotel, and there was an inch and three quarters of water running over a 20-inch weir.

Q. You mean by that to say that there was water to the depth of an inch and three quarters--

A. An inch and three quarters on December 23, over a 20-inch weir, making about 15.60 inches.

. Who was present?

A. S. G. Cousins. I was with him.

Q. State what your next is.

A. The same date, December 23, we measured a well on the west side of the red hill, known as number 1.

Q. State the measurement.

A. The water stood at 74 feet from the top of the curb.

Q. Below?

A. Below the top of the curb. The same date we measured well No. 5 of the San Antonio string just above Base Line., and the water was 129 feet below the top of the curb.

Q. Were either of those wells being pumped at that time?

A. No, sir.

Q. The water was standing in the wells?

A. Yes, sir. On the same date, December 23, we measured the Haskell well, 113-1/2 feet to water from the top of the curb.

Q. Proceed as rapidly as you can.

A. On the same date we measured the well at the end of the Y tunnel.

Q. Which end of the Y tunnel?

A. The west end of the Y tunnel.

Q. What did you find there?

A. 65 feet to water from the top of the curb.

Q. Was the water flowing in that tunnel or standing?

A. No, s ir; it was quite a ways below in the casing. The Chinese well near there on December 23 we found 65-1/2 feet to water from the top of the curb.

Q. Was it being pumped at that time?

A. No, sir; it has not been pumped for several years. The same date, well no. 14, of the San Antonio people, or the one at the head of the Eudy tunnel, we found it 113 feet to water. That is, water was flowing out of the well into the tunnel.

Q. 113 feet from what?

A. From the surface of the ground; at the top of the curb.

Q. Did you measure the quantity of water flowing?

A. No, sir.

Mr. Haskell: There have been two orders of numbering of these wells: Which order do you refer to--

Mr. Waters: He is describing the wells. His testimony will

be intelligible.

A. I have described this one as being in the head of the Eady tunnel.

Mr. Britt: Q. Is that the well referred to in the other evidence as the "Big Well"?

A. Yes, sir; it is that big well. That is all the measurements I made on that date, December 25.

Mr. Waters: Q. Did you make some more?

A. Yes, sir.

Q. When?

A. On January 30, 1907, I believe this was. The next day after the bulkhead was shut down. I believe it was shut down January 29, at nine o'clock.

Q. State your measurements, and where.

A. At this date, January 30th, I found the spring water 2-1/2 inches on a 20-inch weir, or 20.60 inches.

Q. You mean by spring water the Cucamonga Springs water?

A. That is the weir by the brick hotel. On January 30, well no. 5 of the San Antonio string above Base Line, 127-1/2 feet to the water.

Q. From what?

A. From the top of the curb. And the Haskell well on the same date, 112 feet to water.

Q. From what?

A. From the top of the curb. And the west end of the Y tunnel, 64 feet to water from the top of the curb.

Q. Where is that curb, in the tunnel or at the top of the surface of the ground?

A. There is a shaft at the head of the tunnel.

Q. I am trying to ask whether your distance is measured from the surface of the ground or from the bed of the tunnel.

A. The curbing stands-- the dirt is thrown up so that you can hardly state; but the top of the curbing on the surface of the ground. It is very nearly the same. Practically the surface of the ground and the top of the curbing. Well no. 14 on the 30th was 100 feet to water.

Q. From what?

A. From the top of the curb or surface of the ground. That is all the measurements I have on that date.

Q. Take the next time.

A. The next measurement is February 9, 1907. The spring water at the weir near the brick hotel was 2-9/16 inches deep over a 20-inch weir. I haven't run it out into inches.

Mr. Chapman: Q. You are making all these measurements the same way, are you not?

A. Yes, sir.

Q. How many inches of water would that make?

A. I didn't figure that out. February 9, well no. 5, 125-1/2 feet to water from the top of thecurb. The Haskell well on February 9, 110-1/2 feet to water from the top of the curb. The west end of the Y tunnel well on February 9, 62-1/2 feet to water from the top of the curb.

Well no. 14, at the head of the Eddy tunnel, the big well, February 9, 84-1/2 feet to the top of the curb. That is all I have on that date.

February 25, 1907. The spring water near the brick hotel, that weir measured 2-3/4 inches on a 20-inch weir, making 50.50 inches.

Well no. 5, on February 23, was 124 feet to water from the top of the curb.

The Haskell well on the same date was 109 feet to water from the top of the curb.

The well at the west end of the Y tunnel on the same date was 61 feet to water from the top of the curb.

Well no. 14, or big well, at the head of the Fady tunnel, was 72 feet to water from the top of the curb.

MMrah 10. The rpsing water near the brick hotel over that 20-inch weir was 3-1/4 inches, or 39.60 inches of water.

Mrach 19, 1907. Well no. 5, 120-1/2 feet to water from the top of the curb.

The Haskell well on March 19 was 106-1/2 feet to the water from the top of the curb.

Q. The well at the west end of the Y tunnel was 58-1/2 feet to water from the top of the curb.

Well no. 14, the big well, was 70 feet to water from the top of the curb.

March 19, the spring water was 3 inches running over the weir, or about 35 inches of spring water.

Mr. Britt: That is theweir at the brick hotel?

A. Yes, sir.

Mr. Chapman: Q. Did you make no other measurements then?

A. I have given those measurements on March 19 before that of the balance of the wells.

On April 4, the spring water near the brick hotel was 2-7/8 inches over the 20-inch weir, or 33 inches.

Well no. 5 on April 4 was 117 feet to the water from the top of the curb.

The Haskell well was 103-1/2 feet to water from the top of the curb.

The well at the west end of the Y tunnel was 56-1/2 feet to water from the top of the curb.

Well no. 14, the big well there at the head of the Eddy tunnel, on April 4, was 67 feet to the water from the top of the curb.

On May 4, the spring water was 2-7/8 inches over the weir near the hotel, or 33 inches of water.

On May 10, 1907, well no. 5 was 111-1/2 feet to the water.

The Haskell well on May 10 was 99 feet to water from the top of the curb.

The well at the west end of the Y tunnel on May 10 was 52 feet to water from the top of the curb.

Well no. 14 on May 10 was 74 feet to water from the top of the curb.

On May 19 the spring water was 2-3/4 inches over the 30-inch weir, or 30.80 inches.

May 20, well no. 5 was 111-1/2 feet to water from the top of the curb.

The Haskell well was 98-1/2 feet to water from the top of the curb.

The well at the west end of the Y tunnel on May 20 was 51-1/4 feet to water.

Well no. 14 on May 20 was 85-1/4 feet to water from the top of the curb.

On May 20 well no. 4 was 115 feet to water from the top of the curb.

Mr. Chapman: Q. Where was that well?

A. The well in theSan Antonio string just north of Base Line.

Q. What did you say was the depth to water?

A. 115 feet. Well no. 3 on May 20 was 115 feet to water.

Well no. 2 on May 20th was 116 feet to water.

Well no. 1 on May 20 was 115-1/4 feet to water from the top of the curb.

On May 20 the Rubio well was 95-1/4 feet to water from the top of the curb.

Now I have two other measurements which I should have given sooner. On May 10, 1907, the water in well no. 4 was 115 feet.

Well no. 3 on May 10, the water was 115 feet to water from the top of the curb.

Well no. 2 on May 10, 116-1/4 feet to water.

Well no. 1, on May 10, was 116-1/2 feet to water.

Mr. Chapman: Q. Where is well no. 1?

A. It is the most western one-- It is the one in that string of wells north of Base Line and furthest west.

Mr. Waters: Q. Of what?

A. The San Antonio string of wells just north of Base Line.

On May 10 the Rubio well was 95-1/2 feet to water.

On September 1st, 1907, I measured the string of water and found 45 inches near the brick hotel.

September 28, the same place and the same water, 37.20 inches of water.

On November 19, 44.21 inches.

On January 15, 1908, 49 inches, or 3-3/4 inches over the 20-inch weir. Those are all the measurements I have.

Q. What is the latest measurement you have given us of the string of wells of the San Antonio Water Company?

A. The 20th of May.

Q. Why did you quit?

A. Why did I quit?

Q. That is what I want to know.

A. The next time I went back I found everything all barred up and spiked up and locked up in such a shape that there was no opportunity to measure any more.

Q. Did you have any talk with anybody in charge?

A. I did not.

Q. Were there any notices posted there?

A. I didn't see any.

Q. When did you say the bulkhead was first closed?

A. About the 2 th or 29th of January.

Q. In what year?

A. 1907.

Q. Do you know from that time on whether there was any waste?

A. I don't think there has been any since. I haven't observed any since then.

Q. Did you observe after that bulkhead was closed any coincident facts happening with respect to water rising or flowing elsewhere?

A. I noticed very quickly that as soon as the water in the bulkhead had raised up, for the first few days the water rose very fast in the bulkhead in the shaft and on well no. 14, and the springs above there were raising very slowly. But the higher the water came in the bulkhead the more the

wells above there and the spring would raise. As I have given the data it shows that.

Q. And you observed it as well, did you?

A. Yes, sir.

Q. You needn't argue it. You have stated the measurements and what you observed. After that bulkhead was closed at the time which you gave of its closing, did it remain closed?

A. It remained closed up till some time in May.

Q. Of what year?

A. 1907.

Q. Then what happened?

A. The water was turned loose. They began to use the water for irrigation.

Q. Then what did you observe?

A. The next measurement after that I noticed well no. 5, immediately above 14, had stood still, while the wells on either side, the further you got away from well no. 5, which is directly north of the ~~xxxxx~~ ~~xxxxx~~ big well in the Eady tunnel were still rising. The wells on the west side especially raised a foot and a quarter, while that other well stood still; and on the start before that well no. 5 had been rising faster than the wells on either side.

Q. And you noticed that the condition reversed?

A. Yes, sir.

Q. When did you next observe any new thing happening, or change in the coincidences?

A. Shortly after that-- I only measured the wells once after that till they were locked up. The next time I went there they were locked up and barred up.

Q. And whether they have made any changes since that or not you are not able to say?

A. No, sir.

Q. Did you take any steps to try to get measurements of those wells that were barricaded?

A. I did. I came to San Bernardino to get you to get consent, or an order of the Court, that we might make a measurement of thosewells; but I never received it.

Q. Have you been there to see whether they have been barricaded?

A. I haven't been back. I have been waiting for an order of the Court or some permission to go and measure them, but I haven't received any.

Q. During the time that you have covered by your actual measurements here were any of the wells of the defendant San Antonio Water Company being pumped, or not?

A. I haven't observed any of them pumping, except the Rubio well and possibly the Haskell well to irrigate the orchard in that immediate vicinity. I have seen the Rubio well pumping.

Q. At the date when you made your measurements were any of the wells pumping? That is to say, did you make any of the measurements while the well was being pumped?

A. I believe the Rubio well was being pumped.

Q. At what measurements?

A. June 10; when I went back to measure the well again I think they were all locked up except the Rubio well. That was being pumped on June 10.

Q. And you have given the measurement on June 10?

A. No, sir; it was being pumped.

Q. Did you measure it?

A. Not on June 10; there was no opportunity.

Q. Did you observe the depth of the water?

A. Not at that date.

Q. If you have observed any other coincidences of fact relative to the flow of water or relative to the condition of any of thosewells or springs, state it without my asking you about it.

A The only thing I have observed is the spring water. We have had twice as much spring water since the bulkhead was put in as we ever had before. And during the time it went down in the summer-- but the bulkhead was closed after the rains. Since that time it has increased considerable.

Q. When was the bulkhead closed this last fall?

A. I can't give the exact date, but it was during the week of the big rain we had in October.

Q. You have given all the measurements subsequent to that time, so that any increase will be shown by the measurements?

A. Yes, sir; I was at this bulkhead about a week after it was closed and I heard the water was up as high as it was last spring,-- about 8 feet from the top. And when I went up there (I can't just give the date), but it was just after those rains, but they had opened the bulkhead and began to irrigate) and the water had gone down two feet. Other parties have measurements since, but that is all I know about it.

Mr. Britt: Q. Mr. Fox, this water which ran to waste below what is called the San Bernardino road or San Bernardino

Avenue, proceeded from what source on the west side of the red hill?

A. Running out of the big well in the Eady tunnel, and from the Eady tunnel it runs west towards Uplands in the pipe line, and was turned out at what I think we had an exhibit here of the San Antonio Water Company, and on that exhibit was what is known as the Stowell sandbox. That is a sandbox 150 yards or such a distance north of the avenue or road running diagonally across that flat about half a mile west from the red hill. It was turned out of that Stowell sandbox.

Q. How does the water get to the Stowell sandbox?

A. From the mouth of the Eady tunnel there is a big pipe line leading off towards Uplands.

The Court: Q. This pipe line follows right along the diagonal street?

A. It runs parallel with the road diagonally across the e, just the same as the road.

Q. How does that sandbox get to the north of the avenue?

A. The pipeline is north of the street some 400 feet .

Q. I thought it was right next to the street.

A. No; it is above.

Mr. Britt: Q. Did all of that water which you speak of reach the sandbox-- the Stowell sandbox-- from the mouth of the Eady tunnel, or was there any of it that came through the pipe from some other source?

A. I can't swear positively to anything of that kind, but I followed through-- I have been all through that flat there and know of this pipe line running west from the Eady tunnel, and it is the only one that I know of that does run through

that. And this Stowell sandbox is where the water did run out in the flat in the fall of 1904 and spring of 1905, the fall of 1905 and the spring of 1906. But then in the spring of 1907 or the fall of 1906 and spring of 1907, after we had made complaint about this water running to waste, it was carried through pipe lines and turned out at other outlets lower down. One place where a good deal was run into the open and into the flat was just below the Santa Fe railroad near Eighth Street and east of Campus Avenue. A great deal of water was turned out there after we made complaint.

Q. What was done with it at that point which you have last mentioned?

A. It ran to waste in the brush and rocks.

Q. Have you ever been down the shaft of that big well?

A. No, sir.

Q. Wherever you speak of spring water in the course of your testimony here, was that water that was measured at the weir near the brick hotel in each instance?

A. Yes, sir.

Q. That is on the east side of the red hill?

A. Yes, sir.

Q. And is that the water which was taken out of the little creek,, the Cucamonga Creek, on the east side of the red hill?

A. Yes, sir.

Mr. Waters: Q. These measurements of water in shafts: With what kind of an instrument were such measurements made?

A. Steel tape.

Mr. Haskell: Q. During these years of which you have testi-

fied, do you know whether or not the San Antonio Water Company has pumped any water from its wells in the neighborhood of the red hill during the rainy season?

A. I never knew of any being pumped during the rainy season.

Q. You have been to other wells frequently during those seasons, have you?

A. Oh, I have passed by there sometimes.

Q. And if they had been in operation when you did pass by you would have known it, wouldn't you?

A. I think so.

Q. Now in regard to this shaft which you have testified to as extending into the Eady tunnel, the shaft in which you made measurements, extends down to the Eady tunnel, doesn't it?

A. Yes, sir.

Q. Do you know how far it is from the top of the ground to the bottom of the tunnel?

A. 115 feet.

Q. How high did the water rise, approximately/ at the highest point at which you measured it, above the floor of the tunnel?

A. While the bulkhead was shut down, from January till May, it rose ~~x~~ 40 feet.

Q. From January till May in the year 1907?

A. Yes, sir. Last year it rose 46 feet.

Q. You have testified, I believe, that the bulkhead was open during the irrigating season of 1907.

A. Yes, sir.

Q. Do you know whether or not the bulkhead was open wide,

so that the water wouldn't rise in the shaft of which you spoke?

A. I have never been up there and seen this water all turned off in the past season. I don't believe it ever was all turned off.

Q. You have examined it during the irrigating season of 1907?

A. I have been there a few times.

Q. And you have looked down the shaft and seen the water?

A. Yes, sir.

Q. About how much of a drop do you think you have seen there, at the lowest point of the water?

A. I was there only a short time after that bulkhead was opened, and I was there again this fall, and two or three times that I was there there was water-- the water was not all turned off.

Q. How near down to the tunnel would you say the water was turned off from the observations that you made?

A. The first time I was there after the bulkhead was opened the water had gone down about 15 feet, and then this fall when I was there again-- I don't know that I was there but twice-- then the water was up over 40 feet at the head of the tunnel..

Mr. Waters: Q. Do you mean 40 feet above the tunnel?

A. Above the tunnel in the shaft, at the head of the tunnel. At that time there was about 34 feet. The water was about two feet lower than it was when I measured it the last time that spring.

Mr. Haskell: Q. That would indicate that the bulkhead had

not been opened to its full capacity, or the full capacity of the tunnel.

A. It might have been in the summer or middle of the summer, and then raised again and I wouldn't know.

Q. I mean at the time you saw it.

A. At the time I saw it there was always water there.

Cross Examination.

Mr. Chapman: Q. How frequently did you see it in the summer of 1907?

A. I saw it on May 20th and June 10th, and then I didn't see it again until about the first of November that I am positive of.

Q. Has there been any change in the 20-inch weir during the time your measurements were taken, over which the spring water was measured?

A. Any change in the weir?

Q. Yes, sir.

A. The weir has been the same now as it was since 1904.

Q. Did you make any measurements of the spring water after May 20th, 1907, and before September first?

A. I didn't make any measurements between June 9th and September first.

Q. What did it measure on June 9th?

A. 2-3/4 inches over the weir, or 30.80 inches.

Q. Did you make any measurements of the Y tunnel between May 20th and September first?

A. No, sir.

Q. There was nothing to prevent your measuring those places, was there?

A. No, sir; I could have measured those.

Q. You say that while the water lowered to some extent in the spring or over this weir during the summer, you still had about twice as much water as usual last year, as you did the year previous or the year before that?

A. It has run pretty nearly twice as much

Q. Did you take any notice of the water during other times in 1903 and '4 down to the present time?

A. Yes, sir.

Q. Isn't it a fact that there was a great deal more running in the season of 1906-7 than in 1905-6?

A. No, sir; 1905 was a wet year.

Q. I am speaking of the season of 1905-6, and by that I am counting from the first day of September, 1905, until the first day of September, 1906.

A. 1904 and '5 was as wet as '5 and '6 or '6 and '7.

Q. I am only asking about the season. Not the calendar year, but the rainy season of 1905 and '6. Was there not very much less rainfall than there was in 1906-7?

A. Well, those last three winters were all wet winters. There was not a great deal of difference. They were all three wet winters.

Q. Did you pay any attention to the rain records in this section of the country during the time you have been here?

A. Not in particular.

Q. Did you keep any records yourself?

A. No, sir.

Q. And you think there was no more water in 1906 and '7 in the season of rainfall than there was in 1905 and '6?

A. Oh, there was possibly four or six inches more; but I have observed that the records run from 26 to 30 inches in these last three years.

Q. From 26 to 30?

A. Yes, sir. But which was the wettest of the three I can't tell you.

Q. Are you counting the calendar years or the seasons of rainfall?

A. I know the first year I was here it was dry, and in the fall of 1904 that was dry, but in a ring of 1905, the 12th of March, we got a flood, and the 12th of the next march there was another fall-- last winter we had lots of rain.

Q. The season of 1904-5 was one of pretty considerable rainfall?

A The latter part was; yes, sir; very heavy.

Q. I am speaking of the entire season of rainfall, from September first of one year till September first.

A. As I remember, there was about 26 inches the first wet year.

Q. That is, 1904-5?

A. Yes, sir.

Q. And 1905-6?

A. About 30 inches.

Q. And '6-'7?

A. I think it was not so much as the year before, but more than the first wet year, and kind of between the two. That is the way I remember those seasons.

Q. I speak of the year 1906-7. You think that was not as

much as the year before?

A. Yes; I think that is the wettest year of the three. The middle year of the three is the wettest.

Q. Do you know what if any work has been done in the foothills to increase the quantity of underground water?

A. At what point?

Q. Above this string of wells of the San Antonio Water Company that you speak of and out east towards the creek?

A. The only thing that I know of, the San Antonio Water Company seemed to be satisfied with what they got in the underflow, but they went and turned the surface flow off so we couldn't get any of it.

Q. Where did they turn it to?

A. On the flats to the west of it and so it has never any chance to get to us at all.

Q. Give us a more accurate description of where they turned this surface water on to the plains?

A. It is a mile or a mile and a half above 19th Street. It is a couple of miles above 16th Street, and it is two miles or three miles above our springs.

Q. On which side of the creek, the east or the west?

A. On the west side.

Q. About how far from the creek to where they begin to spread it over the surface?

A. They throw a dam across the creek and turned the water into the washes. There is times when the creek up near the mouth of the Cucamonga Canyon overflows in the flood times, and by piling a little rock dam in there you can throw the water off into the washes off to the west of the creek.

Q. Did they divert the water and spread it over the surface of the ground and in these washes that you speak of to a greater extent last spring, in the season of 1907, than they had before that?

Mr. Britt: That is not cross examination. There are some of these processes set up in the answer in the case, and it is part of the defendant's case, if it has a value.

The Court: It is pretty hard to tell what is cross examination. It deals with the question of interferences with water. It is responsive to the general proposition.

A. I don't believe they did as much last spring as they did the year before. Of course, they have been doing that all of thosewet years, but the season that I noticed the most was a year ago last spring.

Q. That would be 1906?

A. Yes, sir.

Q. That is when you noticed it the most?

A. Well, both springs. I won't be positive.

Q. That Eady tunnel that you speak of, you say there are more people and more companies interested in that tunnel?

A. I have understood so.

Q. Do you know what companies?

A. The Cucamonga Water Company.

Q. Prior to putting in the bulkheads in January, 1907, had there been any apparatus or device of any kind constructed in that tunnel to prevent the flow of water out of it?

A. I think not. Not that I could find out.

Q. The Cucamonga Water Company furnishes water to a good many people, does it not?

A. Yes, sir.

Q. And from that tunnel?

A. Yes, sir; they got part of the flow of the tunnel.

Q. And how frequently did you observe this waste water off in the rocky points and washes that you speak of, from that tunnel?

A. Well, in 1904 and the fall of 1904 and spring of 1905 I noticed it most every week. Every time I would go to Uplands it would run under the bridge, and I have observed it for weeks and months. I have observed it possibly every week and sometimes once or twice a week.

Q. Isn't that water used in the irrigating season partly by the San Antonio people and partly by the Cucamonga Water Company for irrigation?

A. Yes, sir; in the summer time.

Q. At the time you observed it it was at a time when it was not employed in irrigation?

A. Yes, sir.

Q. When the bulkhead was built in the tunnel in 1907 in January they were able to control the flow of water from the tunnels, were they not?

A. Yes, sir; they controlled it till they opened the bulkhead. It didn't get quite full.

Q. And then they could control it to some extent?

A. I have my doubts about that.

Q. After May 20th or 10th, when you went to this string of wells that you spoke of, you say you found them barricaded and locked up so that you couldn't get any information. Is that correct?

A. That is correct. That is the condition I found them in on June 10th.

Q. Did you make any application to the San Antonio Water Company or the San Antonio-- the Ontario Power Company-- for permission to make measurements in these wells?

A. I had Mr. Waters phone over from his office to Mr. Gregg's to see if satisfactory arrangements couldn't be made. He telephoned over to see if he couldn't get satisfactory arrangements, or he would have to get an order of the court. And Mr. Gregg phoned back that he thought it would be arranged all right and they would allow me to later on. But I never heard anything about it. I never received any permission or any order or anything.

Q. Did you know why they had locked up and barricaded those wells?

A. No, sir.

Q. Did you make any inquiry of them as to the cause of it?

A. No, sir.

Q. Are you acquainted with the president and secretary of the San Antonio Water Company?

A. The president, I am; Mr. Lewis.

Q. Did you ever have any talk with him about it?

A. I did not.

Q. I believe I asked you if you made any measurements in the Y tunnel after May 10th or 20th, 1907?

A. Not after June 10th, I didn't.

Q. Did you make a measurement in the Y tunnel on June 10th?

A. Yes, sir; on June 10th, 1907, it was 51-1/4 feet to water.

Q. In the Y tunnel?

A. Yes, sir.

Q. Can you give us a description of that weir over which the measurements were made of the spring water?

A. Yes, sir. In the first place there was a concrete mason work put in there and an iron or steel weir put in there, and there was a 40 or 50 inch weir put in there, and in the summer of 1904. A gentleman who took water measurements for Mr. Wright here and gave his testimony here at the other session (I can't recall his name just now) he took a piece of sheet iron and made a slot in it on each end of it, 10 inches wide and about four or five inches deep, blocking up the middle of the big long weir, so that over here on this side of the weir and on that side of the weir there are two slots.

Q. Two ten inch slots?

A. Yes, sir; two ten-inch slots, made out of quarter-inch or three-eighths iron.

Q. Did you measure any other wells in that district than those measurements of which you have spoken?

A. None excepting the Old Settlers' well.

Q. Whereabouts is that?

A. To the northeast of the springs and red hills about two miles.

Q. How frequently did you make measurements in that?

A. I have pulled the pump a number of times in 1904-5 and '6-'7.

Q. Have you got a memorandum of your measurements?

A. I never made a memorandum of them.

Q. Did the water increase in that well in 1907 as it did

in the others?

A. No, sir; every spring the water stands 24 feet from the curbing; just about the same thing every spring.

Q. There was no difference in the spring of 1907 from any other spring?

A. No, sir; not a bit. We pumped it a little lower in 1904, and 39 feet from the surface was the lowest.

Q. When left to itself it comes up?

A. To 24 feet from the surface.

Q. Will it remain there during the entire season?

A. It is at that point when we commence to pump every spring.

Q. Then when you cease to pump in the fall does it rise to the same hight?

A. Those dry years we pumped till it rained. I don't remember ~~xxxx~~ whether it was November, December or January.

Q. When you cease to pump does it come up to the same hight?

A. Immediately. It comes right up.

Q. Can you tell us exactly where that is located?

A. I think you will find it near the northeast corner of section 3. Our well is right there. (Pointing to a diagram.)

Q. That is the northeast corner of section 3?

A. I guess it is right in there on lot 8 in section 3.

Q. Near the north boundary of lot 8, section 3? Marked on this diagram 4?

A. Yes; right about there. (x). That is as near as I can locate it.

Mr. Britt: I think these are the wrong bunch of exhibits.

A. Yes, sir; they belong to the Louis Smith case.

Mr. Chapman: Q. Are these two ten-inch weirs both open, and

were you using both of those weirs when you were making these measurements?

A. Yes, sir; always.

Q. And what is the width of the space between the two 10-inch weirs?

A. I never measured that space. I think it was a 40-inch weir in the first place, and the middle half of it was filled up. There is at least 20 inches between the two spaces.

Q. And then a 10-inch space on each side?

A. Yes, sir; open.

Q. Have you any stock in the Cucamonga Water Company?

A. No, sir.

Q. Or in the Cucamonga Irrigating Company?

A. No, sir.

Q. Your interests are all with the Old Settlers?

A. Yes, sir.

Q. In 1903, I believe you say, you first saw that country?

A. Yes, sir.

Q. Is that right? Did you say you first went there in 1903?

A. I think it was 1903.

Q. About what time of the year?

A. In the summer time.. I went there in April four and a half years ago. It will be five years in April ~~xx xxxx~~ since I came to Cucamonga.

Q. That will take it back to 1903.

A. I think so.

Q. Did you have any interest in the country at that time?

A. April 8th was the date that I traded for the property

that I have there.

Q. That is the 20 acre tract that you still own?

A. Yes, sir.

Q. Where did you say that was located?

A. Half way between the bank and the schoolhouse in Cucamonga. On the north side of San Bernardino Avenue.

Q. Did you observe the stream at that time? Did you take a look over the country for the purpose of determining anything about the amount of water that was there then ?

A. Not at that time.

Q. About when did you first observe it?

A. About the middle of the summer.

Q. 1903?

A. Yes, sir.

Q. About how much water was there then in the creek?

A. I should judge about 18 inches; somewhere between 15 and 20 inches.

Q. When was it that you constructed this drain ditch?

A. I did that along about January and February, 1904.

Q. Where was it constructed?

A. We had a big 30-inch pipe line that leads down from the creek to the weir that we have been speaking about, where the spring water is measured near the brick hotel. From the head of that 30-inch pipe line, about 90 feet north, right up the bank, and then turning to the left and running about 100 feet till we got right to the bank of the creek.

Q. You say turned to the left. In which way were you going when you turned to the left?

A. I was running about 15 degrees to the west of north, and

I turned and ran pretty near west.

Q. How far from the creek did you run that cut or drain?

A. I kept just as far from the creek as I could till I turned, and then when I turned I turned and ran to cross under the creek, which I have since done.

Q. Do you know about how much water you collected in that ditch, or increased it?

A. In the neighborhood of six inches.

Q. Has it continued to flow in that ditch ever since?

A. Yes, sir.

Q. To about what extent?

A. Well, it ran down to four inches. Mr. Wright gave a measurement in the other session of four inches. That is the lowest it got in the summer of 1904. And it has usually run about 6 inches, winter and summer, till this fall I increased it again and laid a fifteen-inch steel pipe line under the bulkhead and passed the creek and brought it up about fifty feet from the creek on the west side of the creek.

Q. Wasn't affected during the spring of 1907 in like manner with the other waters that you measured over that weir?

A. No, sir; the ditch didn't seem to be affected at all. I never observed any difference in it.

Q. You didn't make any measurement of the water of that ditch distinct from the sum total?

A. No, sir; I never measured it separate from the creek water.

Q. Did you measure the water in this string of wells that you speak of prior to 1907?

A. No, sir. In December, 1906, just the one measurement

on December 23rd .

Q. How did you get into the well then?

A. The wells we measured at that time were open.

Q. You don't know who opened them?

A. No, sir.

Mr. Haskell: Q. During the irrigating season of 1907 have you visited the mouth of the San Antonio Canyon?

A. No, sir.

Mr. Britt: Where is that bulkhead situated in the tunnel? Is it close to the mouth of the tunnel?

A. No, sir; it is not far from the middle of the tunnel.

Q. I think it has been described heretofore. I merely want to refresh my own recollection about it.

Mr. Chapman: Q. I want to ask you one further question. You made no measurements of the waters in the springs from June 10th to September 1st, 1907? Did you make any other measurements during that time?

A. I made a measurement or two, but the water was practically standing about the same, and I didn't make any record of it. There wasn't much change in the water during the summer, and while I measured it a time or two I didn't make any record.

Q. Between June 9th and September 1st there was a change of how many inches-- 30.80 inches,-- and September 1st, 43?

A. This change that you have reference to there, there was about 30 inches of water running down the creek and in the ditch together, and when I extended the ditch under the bulkhead and under the creek and put in the 200 feet of submerged pipe-- two-foot joints of steel pipe and laid with open joints-- I increased the water from about 30 to about 44

inches. That is the only increase.

Q. When did you do that?

A. Well, I have a book at home that gives a date when my men were working there, but I didn't think to bring it in. I have a book showing the exact date when I started to work and completed it. It was started in August and completed in September, and I measured the water when I started in and there was 30 inches, and when I quit there was 44 inches. The last was the September measurement. But the 30 inch measurement I didn't make a record of that, but I increased it to 44.

Q. You say on September 1st, 43.20, on the 20th of September 37.20, and on November 9th, 44.21 inches.

A. Those measurements are correct, because in September just after I got in this water, I tapped some little reservoirs and they drained out and the water went dropped from 43 down to 37 or 36. That is correct.

Mr. Haskell: Q. This shaft that you speak of that was driven into the Eady tunnel is driven through a portion of the red hill?

A. Yes, sir.

Q. And this well that you speak of as belonging to the Old Settlers' Water Company-- Is that the name of it?

A. Old Settlers' Water Company.

Q. Old Settler's water Company-- I will first ask you in what direction does the red hill run from this tunnel?

A. It runs towards the northeast. That is, you take the range of hills, the creek cuts through and runs northeast for about a mile.

Q. Do you see any undulations of the ground even beyond that to the northeast?

A. Yes, sir; and it is a little more than a mile, almost cat-a-corner across section 4. It would make it nearly two miles.

Q. In reference to this Old Settlers well, on which side of that range of hills is it, in reference to the mountains?

A. Well, it is from the northeast extremity of the mountains, it is about a quarter of a mile east and a quarter of a mile south.

Q. Is it on the south side of this range of hills?

A. It is south and east; about half a mile from the northeast point, south and east.

Q. But it is not between this range of hills and the high mountains, is it?

A. No, sir.

Here the Court takes a recess until two o'clock P. M.

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AFTERNOON SESSION:-

J. B. FOX.

J. B. FOX, being recalled for plaintiffs, testified as follows:

Direct Examination.

Mr. Britt: Q. Mr. Fox, did you in the course of your explorations in the neighborhood of Base Line, and on the death of these wells, the appearance of water in the creek on the east side of the red hill, run any level to ascertain the elevation of the large wells which you call no. 14, and the first manifestation of water in the creek on the east

side of the red hill?

A. I would state that Mr. Cousins had the level of those wells above there on the big well, and we ran the level from the Rubio well, where he had a station, down to the water where the spring water raises.

Q. What do you call spring water?

A. Where the water raises in the Chemenpa creek that makes this spring water that I have been speaking about measuring.

Q. Which side of the red hill?

A. The east side of the big red hill.

Q. You found that elevation to be how much-- The elevation of the first appearance of water?

A. I found the surface elevation there to be 1330.90.

Q. At what time did you make that observation?

A. On May 10th, I believe.

Q. What year?

A. 1907.

Q. Then what point did you select for taking the elevations in the well no. 14?

A. I didn't help to run that level. Mr. Cousins had that level.

Q. Then you don't know what it is?

A. Only as he gave it to me. He gave the level at the big well on the surface as 1400.94.

Mr. Chapman: I move to strike that out as incompetent.

The Court: Stricken out.

Q. Have you got the elevation of the Eady tunnel at the point where it intersects well no. 14?

A. I knowhow deep it is down from the surface. It is 115

feet?

Q. What is the elevation as compared with the elevation of the first appearance of water in the Cucamonga Creek, if you know?

A. It is lower.

Q. Do you know how much?

A. 38 feet.

Mr. Chapman: Q. What is that point that is lower than the water of Cucamonga Creek?

A. Where the casing is cut off in the well at the head of the Eady tunnel where this water has been wasting from.

Mr. Britt: Q. The big well is the same one that you designate sometimes as no. 14?

A. Yes, sir.

Mr. Fox, have you ever noticed the conduct of the water which comes down the Cucamonga Canyon and thence flows on the surface, some of it, in the direction of the Cucamonga Springs?

A. Yes, sir; I go up to the springs after every flood.

Q. Up where?

A. To the springs. This ditch where I dug and built the bulkhead and kept the water out of the ditch. I usually go up several times after a flood, since I have had charge of the water.

. That is close to the brick hotel?

A. Yes, sir; just above there. But it runs right up to the creek bed. I build a bulkhead to keep the creek out of it.

Q. What I am directing your attention to is the water that comes down from the mountains in the Cucamonga Creek, and its

behaviour after reaching the foot hills or the slope at the foot of the mountains, in its course thence down as far as the Base Line or, we will say, the Cucamonga springs.

A. Yes, sir.

Q. Have you been up there frequently?

A. Yes, sir. When there is a big flood it passes by the Cucamonga Springs and under the bridge and across the San Bernardino road.

Q. Suppose it is not a big flood?

A. For a short time there is a big head of water, but it stops very suddenly.

Q. Where does it stop?

A. Usually stops between Base Line and the mouth of the canyon proper.

Q. What sort of land is that between the Base Line and the mouth of the canyon proper?

A. It is nothing but a gravel and boulder bed as deep as the drill has ever been put down, as far as anyone knows.

Q. I don't know whether you sent down any drill or not. I had reference to its appearance on the surface. If you have drilled below the surface and know anything that you can testify, let us have it.

A. I have seen where wells have been dug and drilled and I know the material that came out of it.

The Court: Has the testimony in the McPherson case been stipulated in?

Mr. Britt: It has not been as yet.

Q. This Cucamonga Creek that you speak of alongside of the red hill, state whether or not that is continuous with the

Cucamonga canyon in the mountains-- a continuous wash?

A. Yes, sir; continuous.

Q. Have you observed during your residence there, which is I think since 1903, whether or not every season, unless it be 1903-'4, which was a dry year,-- whether the water came down that wash as far as the springs on the surface in seasons of considerable rainfall?

A. For the last three years there was big volumes of water came down and passed the springs.

Mr. Haskell: Q. I understood you to say that you ran a level from the Rubio well to the point in the creek bed where the Cucamonga Springs xxx water first rises. Is that correct?

A. Yes, sir.

Q. You assumed then that the Rubio well had a certain elevation, did you not?

A. Yes, sir.

Q. What was the elevation at the Rubio well that you assumed?

A. 1460.61.

Mr. Britt: Q. Inches or feet?

A. Feet. 1460.61 feet.

Cross Examination.

Mr. Chapman. . Returning to the flow of waters during the last three seasons, you say it flows a large stream down to the Cucamonga Springs?

A. Yes, sir, large bodies of water pass the springs.

Q. And for what length of time in the season?

A. Well, those big heads of water would run anywheres from one day to a week or two.

Q. How late in the season?

A. Once in a while we see the water in April, but usually most of it in March. There is no water passes after April.

Q. Is that the result of the rainfall in the mountains?

A. Yes, sir.

Q. In taking these levels that you speak of with Mr. Cousins, what part did you take in the performance?

A. I went ahead and-- I suppose I was what was a flagman. I would raise the gauge or lower it as he instructed. Of course, I assisted Mr. Cousins.

Q. What is your occupation, Mr. Fox?

A. Rancher and orange grower.

Q. Have you ever been employed before in taking levels at all?

A. Yes, sir. I have had some experience in that work.

Q. When?

A. In Ventura county.

Q. What part did you take in that?

A. I have assisted different surveyors in running a good many miles of wagon road grades.

Q. What assistance did you give?

A. In different ways.

Q. Did you ever take the level yourself?

A. Yes, sir.

Q. With what?

A. With different kinds of instruments.

Q. Can you name some of them?

A. Well, the compass, and I have used other instruments that were not the regular surveyors' instruments. I have used

surveyor's instruments some.

Q. What surveyor's instrument did you use ?

A. A regular surveyor's compass. I don't know what you call it.

Q. Don't you know the name of it?

A. No, sir.

Q. How did it work?

A. The same instrument that the County Surveyors use. I have assisted the County Surveyor a good many times.

Q. In what method did you take a level with one of those compasses?

A. You set the instrument and get your level, and then you take your level to any point that you want to take, or if you want to run on certain grades you set your instrument on whatever grade you want to run on. It depends on what grade you want to run on.

Q. How did you take your levels?

A. I had a graduated staff with a target on it, and you set that target and from your instrument you level with that target at the starting point, and take your levels up or down, either way.

Q. You say you assumed what elevations at the Rubio well?

A. 1460.61 feet.

Q. Was that the surface of the ground?

A. The top of the curbing. The top of the platform that the derrick sets on.

Q. Why did you assume it?

A. Because Mr. Cousins had run a level at that point before from other points, in making other surveys.

Q. And told you that that was the elevation?

A. Yes, sir.

Q. And that is all you know about it?

A. Yes, sir.

Q. You say you ran a level to the waters of Cucamonga Springs?

A. Yes, sir.

Q. How was that level taken?

A. I carried the flag or staff and went ahead and set it as Mr. Cousins would want it, and he would go beyond me and he would take the level back and forth till we got the fall from the Rub o well where the water rose.

Q. How did he take the level?

A. With the instrument that he surveys with.

Q. Do you know the name of the instrument?

A. I don't know what you call it.

Q. What did you say the difference in elevation between the two points was, between the Rubio well and the Cucamonga Springs?

A. I didn't say.

Q. Did you know anything about the elevation or difference in elevation except what Mr. Cousins told you?

A. No, sir; all I knew about it was the level that we ran.

Q. I understood you to say that the difference in elevation of the Cucamonga Springs and well no. 14 was 38 feet?

A. Yes, sir.

Q. How did you know what the elevation of either place was?

A. I only know from what I have been told in well no. 14. That elevation was given to me. I saw those figures compared

with Mr. Wright. Mr. Wright and Mr. Cousins compared figures on that and Mr. Cousins had that Rubio well as a starting point.

Q. The figures themselves you have got entirely from what Mr. Cousins told you?

A. Yes, sir.

Q. Did you know at what point on the well no. 14 the comparison was made of the elevation of the Cucamonga Springs

A. The bottom part, 113 feet from the surface, is the point he made the comparison at.

Q. The basis of that comparison, the data from which it was made, you derived entirely from hearsay?

A. Yes, sir; as far as well no. 14 and the Rubio well is concerned is just from hearsay.

Q. Did you know anything more about the elevation at the Cucamonga Springs than what was told you?

A. I didn't know any more about it than the starting point. I helped run the line down there and helped run the level to the springs.

Q. But the levels themselves were taken by Mr. Cousins?

A. Yes, sir.

Q. And the result announced to you by him?

A. Yes, sir; and we looked over the figures together.

Mr. Chapman: I move to strike out the evidence of this witness as to levels and comparative elevations between the Rubio well and the Cucamonga Springs, and the Rubio well and well no. 14 and the Cucamonga Springs and well no. 14, on the ground that it is hearsay and incompetent.

Mr. Britt: We will not resist the motion.

The Court: Let it be stricken out.

Q. At the point where the waters coming from the Cucamonga Canyon disappear on the surface, about how far above the Base Line was it to where they disappeared?

A. That depends entirely on the volume of water there is coming down the Cucamonga Canyon.

Q. Did you observe it last year?

A. No, sir; I didn't go up-- Yes, I observed it last year.

Q. And at what time in the year did it disappear?

A. I don't think there is any crossed the Base Line after April.

Q. And how far above the Base Line was it dry in July, 1907?

A. I didn't go up the wash in July 1907.

Q. Did you in June?

A. No, sir.

Q. In May?

A. No, sir.

Q. How many observations did you make in the year 1906?

A. I wish to correct that a little bit by saying that in May and June I was above the Base Line, butonly for a few hundred yards; a short ways above.

Q. Not up so far as the dry land extends?

A. No, sir.

Q. In 1906 how was it?

A. In 1906 I was up above Base Line a mile and a half, I guess, before I came to water in June.

Q. And in 1905 how was it?

A. I was above the Base Line considerable ways, but I wasn't up as far as the water.

Q. Were you in 1904?

A. No, sir.

Q. And in 1903?

A. In 1904 I was up and saw the water running at the mouth of the canyon out into the flat, out of the mouth of the canyon, but I don't know at what point it sunk.

Q. How far is that above the Base Line at the mouth of the canyon?

A. It is between three and four miles.

Q. In 1905 how far above Base Line were you in the summer season?

A. I was a mile and a half above Base Line.

Q. No fanther?

A. I don't think so.

Q. No water there?

A. No, sir.

Q. Do you remember how far water flowed down-- Do you remember whether the water flowed down as far as the Springs at any time in the year 1904?

Mr. Waters: You mean the surfaae stream from the mountains?

Q. Yes, sir.

A. If it did I didn't see it.

Q. Did you in 1905?

A. Yes, sir.

Q. How late in the season was the latest?

A. About April.

Q. How long a time did it flow?

A. The first time it came down there was the 12th of March, and it ran for several days. At the time we had the big

flood it ran a couple of weeks, possibly. And after that when the rain and water would come down there might be a big stream running there of four or five hundred inches or may be a thousand inches, and it would all stop at once. At the time theSan Antonio people were turning the water up above there at the mouth of the canyon and turning it to the southwest, I have been up there and there would be a big volume of water, and in a few hours there wouldn't be a bit of water. It depends on when they turned it out, how long it would run. It would run all the time if it wasn't diverted.

Q. Did you see them divert it?

A. No, sir.

Q. When it was flowing four or five hundred or a thousand inches after a rain did you follow it up to see whether it came down from the Cucamonga Canyon or whether it was a collection of surface water that fell on the plains?

A. I did not, because I know the condition of the ground and the lay of the land well enough to know that it came from the mountains.

Q. Did you see the water accumulating in that Cucamonga Creek to the Springs, that it did came from the surface of in the immediate vicinity and not from the mountains canyon?

A. No other time than just during a big storm.

Q. Wasn,t that the case with this 500 or 1000 inches of water flowing down there in April, and immediately after the storm wasn't that the accumulation of the surface water in the vicinity as well as the water from the Cucamonga Canyon?

A. No, sir; it was not. Because all the water that would accumulate there would run off in a few hours; and I have

seen this water run several days..

Q. It didn't run several days in April, I understand?

A. I think it did. They had some pretty big rains in March and April three years ago.

Q. That was 1905. How was it in 1906?

A. It was pretty much the same. There wasn't much difference.

Q. And in 1907?

A. The rains were practically the same; not very much difference.

Q. Was the flow of the water the same?

A. Yes, sir; there wasn't much difference. It was pretty much the same in all three of those years.

Q. How late in the season of 1907 did you see the water flow down to Cucamonga Creek?

A. I think it was about February. We didn't have spring rains last spring.

Q. Can you locate on this map where that Old Settler's well is?

A. I can do it better on a map that I had made of this business. We filed it here with the Court.

Q. Can you locate it on plaintiffs' exhibit 1?

Mr. Britt: Is this the map you refer to?

A. It is the map that Cousins made. This is section 3 here, and here is the Old Settlers' well. It is pretty near the northeast corner of section 3.

Q. Is it marked "Old Settlers' Well"?

A. Yes, sir. (On Exhibit 6.)

Q. And the place marked "Old Settlers Well near the northeast corner of section 3 is the well which you have referred to in your testimony? A. Yes, sir.

W. T. LEWIS.

W. T. LEWIS, heretofore sworn and examined, being recalled by plaintiffs, testified as follows:

Mr. Waters: Q. You have already testified as to your official capacity with the defendant.

A. Yes, sir.

Q. You are president of the defendant, I believe?

A. Yes, sir.

Q. Have you as president any control or possession of any reports, documents, books or papers, or anything in writing belonging to the defendant, which will show the amount of water discharged from the Fady tunnel in the year 1900?

A. I think we have such a record.

Q. Where is it?

A. I think it is in the office of the company.

Q. In what shape is it? In a book or a lot of loose sheets of paper?

A. It is in the form of engineer's reports-- loose sheets.

Q. What engineer?

A. Mr. Trask.

Q. And is it made by him or merely returned to him by other employes of the defendant?

A. Made by him.

Q. And is it made from original investigations or observations of his own, or is it made from reports received from other employes of the company?

A. Made from his own original reports.

Q. From his own observations?

A. Yes, sir.

Q. Have you in addition to those reports any reports of gate keepers or zanjeros or other employes, showing the amount of water coming from that source, in the year 1907?

A. The zanjero has filed no report in the office. I presume he has a memorandum.

Q. Is he required to keep a book of any sort showing the output of that tunnel?

A. No; he is not required to keep a book.

Q. Do you know whether he has kept such a book or not?

A. I am confident he has a memorandum. I don't know how extensive it is. I have instructed him to keep a memorandum of the conditions there.

Q. And have you seen the book?

A. No, sir.

Q. You don't know whether he has obeyed your instructions or not?

A. No, sir.

Q. Has any such book been returned into the office that you know of?

A. No, sir.

Q. Do you know whether or not it has been handed in to the secretary or clerk?

A. I no of no such action being reported to me.

Q. Then you don't know whether it has been turned into the secretary or not?

A. No, sir; I do not.

Q. You have a place into which to turn such things-- an office, with a secretary or clerk?

A. Yes, sir.

Q. And he keeps the archives of the company?

A. Yes, sir.

Q. What is his name?

A. J. N. Hartley.

Q. Where?

A. Ontario.

Q. Where is the office kept?

A. Ontario.

Q. Is there kept or was there kept in the year 1907 a record of the water supplied from the Eady tunnel, and to whom? In other words, showing what disposition was made of the water which came out of the Eady tunnel?

A. Only in a general way. The water from the Eady tunnel mingles with the waters of our general system. Under the conditions it is practically impossible to ascertain just where that water goes, except it goes into a conduit of our company at Ontario, or the colony of Ontario.

Q. Has the same method been adopted with reference to keeping records of the amount of the product of the Eady tunnel water on the year 1906 as it was in 1907? Can we find that in the same way as you have indicated that it was in the other year?

A. Yes, sir.

Q. In the same way?

A. Yes, sir.

Q. How as to the year 1906?

Mr. Chapman: That is what he just said.

Q. How about 1905?

A. I am not sure about that.

Q. Did you have a fire at some time?

A. We had a fire in the office, I think it was in the winter or spring of 1905. I know we lost a good many valuable papers at that time, and I am not sure about the reports from that Eady tunnel and from that time back.

Q. But from that time down you have had no fire and consequently you have them?

A. I presume they are in the office.

Q. Now with reference to the diversion of the flood water of Cucamonga Canyon streams as distinguished from any other stream, do you know when if ever your company in any wise constructed any levees, ditches, cuts, or dams, up toward the mouth of the Cucamonga Canyon, which had the result or effect to divert the flood water of the Cucamonga Canyon in a channel different from that which it would naturally flow in?

A. I want to answer that correctly, and to do so I must say that from the mouth of the canyon there are several channels; and during and after floods, or during a flood, sometimes a little drift wood occurs and the waters on the debris cone of the canyon in which the Cucamonga stream runs-- sometimes it runs naturally in one channel and sometimes naturally in the other, and it spreads over the cone., as nearly all mountain streams do.

Q. All right. That we recognize as a fact. Now then, what I am trying to get at from you is whether your company has interfered with that state of nature by artificial work. In other words, did you do anything to help divert it over your way over the debris cone, or did you let it run?

A. We haven't diverted it for the purpose of running it

over our way. We have simply assisted nature in spreading that waste water over the debris cone that it might sink into the gravels of that debris cone and augment and increase the underground waters below the Cucamonga Canyon.

Q. Now then, can you tell us where you have put any obstruction in any of those old waterways, or new ones, to divert that flood water to the easterly side of the debris cones?

A. The obstructions and dams that you have referred to are simply temporary affairs, and can hardly be called dams, from the fact that we have sent our men up there after a flood and have instructed them to spread the waters of any larger stream in either direction, either east or west, wherever they can spread it out, so that the waters would not waste down towards the Santa Ana river but be retained in the gravel beds immediately about the mouth of the canyon.

Q. I will put the question right straight at you: Have you not given the orders to turn the waters to the westerly side of the debris cone instead of having your men go up there under orders to spread it out irrespective of which side?

A. No, sir; I don't know of any such thing. It is a fact that we have never paid any attention as to the diversion to the east or to the west, except to divert it from the larger channels so that it might be spread out over the debris cone. It has not been the custom of our company to turn it entirely to the west or the east, but simply to spread it, and that is the orders I have given our employes. This question of spreading it to the west is a new one to me.

Q. Have you ever been up there?

A. A good many times.

Q. Have you been there since this turning was done?

A. I have assisted in turning it myself.

Q. I am asking you to name one place where you ever turned it to the east.

A. I have myself assisted in digging a channel to some extent where it turned to the east.

Q. Haven't you got a schedule of what you have done in your office? Haven't you a map of what you did?

A. No, sir; our instructions have been to our men to spread the water so that it may enter the gravel, irrespective of the streams running to the east or west.

Q. It seems to me that that is three times you have said that. I am willing to pass it now. What is the time when you first began that work? Fix the date? What month or year, as near as you can?

A. The work was inaugurated practically in 1903-- in the fall of 1902 and winter of 1903, and orders were given at that time, as well as I remember, to divert such flood waters as might be running in the channel, which would extend to some extent down the valley to the river, to retain such waters upon the gravels. But whether we actually did any work of any amount that year, I can't state. I would have to refer to the rainfall, because it was in the years of heavy rainfall that the work was practicable.

Q. Can you name a year when you first did any considerable extent of that work?

A. I would have to refer to the card of the rainfall to give you an intelligent answer on that subject.

Q. If we assume that 1905 was the most pronounced year or most pronounced rainfall after the dry years-- comparatively dry years-- that would be three seasons ago-- the first year

you didbegin, irrespective of what year it was, the year you did begin, how much of that work did you do?

A. I can't state from memory how much we did. I know what our intention was.

Q. I would really rather have what you did, even if it is vague, than your intention, however definite they may have been.

A. We looked after the waste water and distributed it over the gravel beds and through the innumerable channels that radiate in different directions from that debris cone.

The Court: What was the theory or purpose of that?

A. In order to augment the underground reservoirs.

Q. That was your only purpose,-- to keep it from running off?

A. Yes; that was the only purpose.

Mr. Waters: Q. You didn't divert it for immediate use?

A. No, sir.

Q. But only for the purpose of sinking into the ground?

A. Yes, sir.

Q. And keeping it from running away entirely?

A. That is right.

Q. The first year you did any considerable amount of that work did you see any of it done yourself?

A. Yes, sir; I was there myself in different times in different years.

Q. Will you please describe the extent of that work the first year, about how many trenches and what length and what direction they took?

A. There were very few trenches made. The idea was to just

distribute the water and disturb the banks in such a way that the water would spread from the channels that we re running.

Q. As a matter of fact isn't this the case: That on that debris cone you would find certain irregular natural depressions extending xx xxx xxxxxx from up stream towards down stream in varying directions, and you would find a body of water in one of these and you would try to split it up into some of these other ditches or washes, and utilized the washes upon the ground instead of digging trenches?

A. Just so. They all trended in a southerly direction and we tried to spread them.

Q. They usually went down hill, didn't they?

A. Yes, sir.

Q. How would you divert the water? By throwing in a dam of stone?

A. By sometimes digging a little trench for a few feet, and sometimes by arranging a few rocks so that it might spill over a little into the other channels.

Q. You would put some obstruction in the stream as it ran and find a low place for it to run2 out, either by diming, or in a state of nature?

A. Yes, sir.

Q. Do we understand you to say that as a matter of fact when you got your work done in any one season that there was not a greatly predominant quantity of the flood water-- t that it was not diverted to the west instead of to the east?

A. My impression is that the larger flood streams ran in the east channel--

Q. Naturally?

A. Naturally or unnaturally, it ran there; sometimes drift wood would come down and make a little obstruction and it would work off into another channel, and so on; and sometimes it will work in one direction and sometimes in another.

Q. What I want to get at is as a matter of fact as a general proposition, didn't your work or the work of the company deflect the water westward instead of eastward?

A. I can't say as to that. There was no attempt made to divert it to any point of the compass, but simply to spread it on the debris cone as far as possible, whether to the east or to the west.

Q. I will ask you for your memory: Do you not remember that a greater quantity and body of that water was deflected and was taken toward the west and the lesser and smaller quantity towards the east by your work?

A. I remember a light obstruction or dam placed in there quite a number of years ago, I presume by the old Land and Water Company, in which the water was obstructed from flowing to the west and made to flow to the east.

Q. Was that allowed to continue?

A. The extreme rainfall and heavy floods tore a part of that out and then the water flowed in the natural channels to the west where it had previous to the time of that obstruction.

Q. And you helped it out, didn't you?

A. We helped it out in every direction.

Q. You didn't help it to the west, you are sure of that?

A. We helped it both east and west; wherever we could get

an opportunity to get it out so that it would sink in the gravel beds. The question of east or west had nothing to do with it, so far as we were concerned. We cared nothing about that. Our idea was to get it out.

Q. Did you go to any considerable expense?

A. We spent several hundred dollars up there in the aggregate.

Q. Don't you recollect that there was a resolution adopted by which that work was done, a resolution of your board of directors, that that should be done, how much should be expended and what was to be the price of it, and how it should be done?

A. I don't remember it. I remember this: The board of directors gave me authority to go up and use my discretion in putting that water on the debris cone, but not to the extent that you have suggested.

Q. And is that record extant, or has it been burnt up?

A. I can't tell you. I am not sure that it is part of our records or ever was. But I know I had authority to do that work. It may be part of the record.

Q. Do you remember how high up toward the mouth of the canyon or how close to the mouth of the canyon you did any of this work?

A. We began this work a little above Nineteenth Street and we went further up the canyon as the water increased, and have done work up-- I don't know what you would call the mouth of the canyon.

Q. Assume that I would call the mouth of the canyon to be what you would understand to be the mouth of the canyon.

A. We went up to very near the mouth of the canyon.

Q. I understand you to say that you began a little above Nineteenth Street.

A. I was given authority in the fall of 1902 or winter of 1903 to conserve those waters in the gravel beds, and from that time to this I have carried out that authority to the best of my knowledge.

Q. My question is where did you begin on the lower side.

A. We began above Nineteenth Street quite a distance.

Q. Is that north of the Base Line?

A. Base Line is just above Sixteenth Street. It must be threequarters of a mile above or a mile, perhaps. That is, the street itself is a mile above or threequarters of a mile. We must have been a mile above in our operations.

Q. Can you produce your engineer's reports showing the output of the Eady tunnel, or will we have to go to the expense of sending a subpoena for them?

A. I can bring them.

Q. If you can bring them it will save expense. And if you have anything which will give us a definite date on which this diverting of the flood water-- If you have any document or resolution to show the date when that was first inaugurated we will be pleased to have that.

A. I will be glad to do that.

Mr. Haskell: Q. Have you ever for your company diverted any of the flood waters of the San Antonio Water Company in the same way that you have the Cucamonga Canyon?

A. Yes, sir.

Q. Whereabouts?

A. We have diverted that on the land in the canyon to a considerable distance below the mouth of the canyon; from the upper part of the colony for a couple of miles above.

Q. That water comes from the San Antonio Canyon, doesn't it?

A. Yes, sir.

Q. In which direction did you divert that water, to the east of the mouth of the canyon, or to the west?

A. A larger part of our diversion is in the canyon itself, and we diverted it to the east or west as the conditions indicated, to get it into the gravels.

Q. When you divert it towards the west it goes towards Pomona, don't it?

A. I can't say.

Q. The slope of the ground or debris cone at the mouth of the San Antonio Canyon is several hundred feet higher than the debris cone of the Cucamonga Canyon as it debouches into the valley of San Bernardino?

A. I never have taken elevations.

Q. You could tell that by the eye, couldn't you, by looking at it?

A. I have known people to become fooled by looking for elevations with the eye.

Q. But you couldn't be fooled on that elevation, could you?

A. I would take it that the elevation is greater at the mouth of the San Antonio Canyon.

Q. Several hundred feet ?

A. I can't give it to you in feet.

Q. And water diverted towards the west goes towards Pomona?

A. I don't know.

Q. It goes in that direction, don't it, if you divert it?

A. I don't know.

Q. It does as long as it runs on the surface?

A. But it doesn't run on the surface. It gets into the gravel as rapidly as possible.

Q. There is one surface channel going out of the San Antonio Canyon that goes to Claremont, isn't there?

A. I have never seen it going to Claremont.

Q. It goes pretty near to Claremont, doesn't it?

A. It goes between Claremont and the Ontario Colony. I never followed it down.

Q. You have seen that channel with large live oak trees in it, haven't you?

A. Not in the channel; no, sir.

Q. Well, near the channel.

A. Yes, sir.

Q. And there is a deep depression just west of this ~~xxxxx~~ channel where the water now runs? There is a wide depression with large oak trees and sycamores?

A. Where do you refer to?

Q. Between Ontario and Claremont, or Uplands and Claremont.

A. I know it is to the west of Claremont. There is places over there with oak trees etc.

Q. And water rising there in places and flowing on the surface at the present time, isn't there?

A. I don't know it from personal observation.

Q. Haven't you seen those springs and cienegas along the line of the Atchison, Topeka and Santa Fe railroad?

A. No, sir; not during the last year or two.

Q. Haven't you traveled that way?

A. I have occasionally passed over this Santa Fe, but I very seldom go to Los Angeles on that road.

Q. Now in diverting the flood waters of that San Antonio channel, what purpose did you have in view in spreading those flood waters out?

A. To conserve the flood waters and cause them to sink into the gravel bed of the debris cone, that they might percolate into the lower strata for the conservation of the water.

Q. And that supplies your wells and tunnels around the red hill? Isn't that true?

A. That question is beyond me. I don't know whether any of that water ever got to the red hill or not. I am not sure about it at all.

Q. What purpose did you have?

A. Our purpose in diverting those waters above the diversion dam was to increase the summer supply of water. We believe we have done that The increase in that summer supply underneath assists ~~xxxxxx~~ Pomona and Ontario.

Q. You have an idea that the spreading out of the flood waters increases the flow of the ~~xxxxxxx~~ tunnel?

A. At the Eady tunnel ?

Q. Yes, sir.

A. From San Antonio Canyon?

Q. Yes, sir.

A. I never advanced such an idea. I would have to think about it for a while.

Q. What do you think about the spreading of the flood waters at Cucamonga Creek?

A. My theory is--

Mr. Waters: We object to this witness stating his theory. If the intervenors want it, all right. I think this gentleman is loaded, with all due respect and not in an offensive sense, and I don't propose to touch him off. I insist that it is incompetent.

The Court: His opinion or theory is not material.

A. The fact is, I only have a theory. I don't know a thing about it and I think no mortal man knows anything about it.

Mr. Waters: I move to strike that out.

The Court: Strick out. We may find a man what does know something about it, or who will testify that he does.

The Court: Was there any understanding at the former session as regards the manner of examination between yourselves and intervenor? Were you in the same category or what?

Mr. Waters: There was no understanding. There is a comity between us but nothing else.

Mr. Waters: Q. I would like for you to bring the corresponding reports to the string of wells that you didof the tunnel, if we haven't got it already in the evidence-- But I think we have got that.

Cross Examination.

Mr. Chapman: Q. The San Antonio Water Company has got a tunnel that lies below the diversion dam in the San Antonio Creek?

A. Yes, sir.

Q. And that is an entirely separate tunnel from the Eady tunnel?

A. Entirely separate; yes, sir.

Q. You have some wells in there too, haven't you?

A. Yes we have two wells some distance south.

Q. And the water from those wells goes where?

A It goes into the system of the San Antonio Water Company.

The Court: Q. Is the San Antonio Canyon and Creek different from the Cucamonga Canyon?

A. It is entirely different.

Q. It lies to the west?

A. Yes, sir.

Mr. Chapman: It is separated by a mountain range?

A. Yes, sir.

Q. This tunnel below the dam, which I will call the San Antonio tunnel, and the one from these wells that are conducted to Ontario, have nothing to do with the Fady tunnel, have they?

A. Nothing whatever so far as I know.

Mr. Waters: I think that is calling for an opinion. If the question is more specific, or they have a pipe line or ditch connection, that is all right.

Q. That is what I mean. If the waters taken from San Antonio tunnel and the water taken from xxx xxxx those wells, that they are not conducted to the Fady tunnel, but carried in other tunnels and pipe lines to Ontario.

Mr. Waters: There is no objection to that.

1 Q. In any of the flood waters of San Antonio Creek, spread
2 out over the country, in the east towards Downey?
3 A. Not naturally.
4 Q. I mean spread out by you?
5 A. Yes, sir; there is a naturally drainage from the wa-
6 ter floods that passes off during our gathers, rainfall and
7 others, by way of Lynn Creek.
8 Q. And the object of that is that?
9 A. To saturate the underground strata of sand and gravel.
10 Q. All these operations undertaken by you are to prevent the
11 flood waters from flowing off in channels rapidly, , and
12 spreading it over the country, so that it will feed its way
13 into these gravel beds?
14 A. That is the object of our theory.
15 Q. That is the object of all these operations there?
16 A. Yes.
17 Q. And you say you think you have conserved the amount of
18 water that is flowing in those gravel beds: Does that
19 include also below the division dam?
20 MR. HASELL: I thought that was stricken out.
21 MR. CHAPMAN: Well, yes you mistaken.
22 MR. WATTS: I object to this question on the ground that it
23 is not responsive to the direct examination, and to treat
24 it as a direct question, direct examination, it is leading
25 and suggestive; and on the ground that it is immaterial as
26 calling for what he thinks; in other words, his opinion, and
27 there has been no foundation laid for asking the opinion of
28 this witness as witness.
29 MR. CHAPMAN: Mr. Lacke stated in his direct testimony that the

object in diverting the water from the San Antonio Creek, was to increase the waters, for the benefit of Ontario as well as Ontario; he said that was the object of it and thought he had done it.

MR. WATSON: That he had increased the water in the Duffey tunnel.

MR. CHAPMAN: The surface water which he was speaking of as spreading over the country there to increase the extent of percolation, he said was for the benefit of Pomona, as well as Ontario, and simply increasing the amount of water percolating in the voids, and he thought they had established that purpose.

MR. WATSON: I guess he can testify to that as to the Duffey tunnel; let it go.

Q. Does that apply as well to those gravel beds through which the San Antonio Tunnel is fed, in the bowels and wells on this side,- whether the operations he speaks of in the San Antonio Canyon, are intended to supply the tunnel of the San Antonio Canyon as well, with a greater amount of percolating water than otherwise would reach it: Is that the case?

MR. BRITT : No object to that. That is to say this San Antonio Canyon is four or five miles away to the westward from the district of country, about which we are here litigating, and it is not a proper subject of inquiry at this stage of this case at any rate; and the testimony is incompetent, as asking for the conclusion and opinion of Mr. Wade.

MR. CHAPMAN: Mr. Sackett is the gentleman who began to inquire of this witness about their operations in the San An-

tonio Canyon, spreading the water over the surface there; all that I am trying to show by this witness, that that has not for its object the country on this side, and their works, but mainly for that San Antonio Tunnel, with which the Cucamonga people have nothing to do so far as I know. It is not connected in any way with their system.

THE COURT: It seems to me their object and purpose in that canyon is scarcely relevant to any inquiry here; he can tell what they have done, but it don't seem to me there is any relation between the two canyons; at least so far as is shown by the evidence as yet.

MR. BRITT: I think the evidence shows somewhere that it is about four or five miles from one stream to the other.

MR. WATERS: This witness just testified to that himself.

THE COURT: The objection will be sustained.

MR. CHAPMAN: Exception.

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C. W. JOHNSON:

C. W. JOHNSON, a witness called by plaintiff, being first duly sworn, testified as follows:

DIRECT EXAMINATION.

Q. BRITT, Q. Where do you live?

A. Cucamonga.

Q. At the Town of Cucamonga?

A. I live part way between Cucamonga and Upland, on what they call Cucamonga Avenue.

Q. All that country there is laid off into streets of some designation, some specific designation?

A. Yes, sir.

Q. It is called a rural district?

A. Yes, sir.

Q. When you speak talk about avenues and streets, you don't mean they lie in a town?

A. Not particularly, where I live no; there is town sites there.

Q. Where do you live with reference to what has been called the brick hotel and the Cucamonga Springs?

A. I live about three quarters of a mile to the west of that.

THE COURT, Q. West of the red hill?

A. Yes, sir; west of the red hill.

MR. BRITT, Q. What are you engaged in?

A. I am farming at present.

Q. How long have you lived in that neighborhood?

A. On and off since 1885.

Q. Do you know how to measure water?

A. Yes, sir.

Q. Do you know how to take the depths of wells?

A. Yes, sir.

Q. Look at this sheet now shown you, which is called "Tabulation of measurements - " or has the inscription "Tabulation of Measurements of Water Development at Red Hills, Cucamonga, California", and state whether or not you made the measurements which are represented in this paper?

A. Yes, sir; these are the measurements that I have made and handed in to Mr. Wright.

Q. Commencing July 7th, 1904?

A. 1906, and continued to January 12th, 1906.

Q. State whether or not the several measurements which are

recorded here in this sheet were correctly made?

A. Yes, sir; correctly made.

Q. Come here and explain the several columns. The first column headed "Name of Observer", and under that C.M. Johnson: Are you the person designated who made the observations?

A. Yes, sir.

Q. The next column towards the right "Date", what does that represent?

A. That is the date of the month and year, there measurements were made.

Q. Third column headed "Weir No. 1". Where is weir number one?

A. At the mouth of Tunnel No. 2 or Eudie Tunnel.

Q. On the west side of the red hill?

A. On the west side of the red hill.

Q. The fourth column headed "Weir No. 2", what does that indicate?

A. That is a combination measuring box, at the mouth of tunnel number two.

Q. And the fifth column is headed at the top, "Total at mouth of Tunnel No. 2": Does that mean the total of the water flowing at the two weirs, the measurement of which is represented in the third and fourth column?

A. That is the total measurement; yes, sir.

Q. State what those figures under the column headed "Weir No. 2" indicate, what they show?

A. It shows the amount of miners' inches of water flowing over those different weirs.

Q. Well, on this column headed "Weir No. 1", does that indi-

cate more than one weir?

A. No, that is one weir.

Q. What do the figures in column headed "Weir No. 1" indicate?

A. The amount of water flowing over that particular weir.

Q. Where is that situated with reference to the mouth of the Radio Tunnel?

A. It is practically about I should judge, 100 feet above the mouth of the tunnel; it is a new division box that was made, a new measuring box.

Q. What do the figures here indicate in the fourth column, under the caption "Weir No. 2"?

A. Those are in that same combination box, from a different weir.

Q. Two weirs in the same box?

A. Two weirs in the same box.

Q. State whether they both of them measure water proceeding from the tunnel?

A. It is the total flow of the tunnel.

Q. Then the figures in the fifth column headed "Total at mouth of Tunnel No. 2", indicate what?

A. They are the combination of those two weirs, the total measurement.

Q. The total flow of water from the weir?

A. The total flow of water from the tunnel.

Q. State whether the figures in the fifth column, under the caption heading "Total at Mouth of Tunnel No. 2", indicate the whole amount of water, on the several days shown in the second column, flowing from the tunnel?

A. Yes, sir; those are the total amounts.

Q. For the purpose of illustrating, taking the date June 17th, 1907, what was the total amount of water as found by you, to be flowing on that day out of the Wadie tunnel?

A. The total amount was 224.66 miners' inches of water.

Q. Measured under what head or pressure?

A. That is under a four inch pressure; that is figured from cubic feet per second flow.

Q. At the rate of fifty inches per cubic foot?

A. At the rate of fifty inches; yes, sir.

Q. Now, then the next column; there is one blank, headed "Weir No. 3, in which there are no measurements; the column following that has the caption "Depth of shaft to water, 4 and 4 A": what is indicated in that column?

A. Well that is the measurement of the height of the water in the tunnel; that is from the top of the curbing down to where the level of the water would be in the shaft; that is up about not quite three-quarters of a mile from the mouth of the Wadie Tunnel.

Q. Do you know where the well number 14, marked on Plaintiff's Exhibit 1 is situated? The so-called big well?

A. Yes, sir.

Q. How far is this shaft below that well?

A. I never measured exactly; I should judge about 400 feet; may be a little more.

Q. In this column which bears the heading or caption "Depth of shaft to water, 4 and 4A", do those figures indicate the depth of water in the tunnel, at that shaft?

A. They can be figured out from that; they indicate the level of the water from the surface down to this point.

Q. Is that shaft connected with the tunnel?

A. Yes, sir; it is connected with the tunnel.

Q. Does it ascend vertically from the tunnel to the top of the ground?

A. Yes, sir.

Q. For instance take that column, here are the figures, on June 18th appear the figures 58.82: What do those signify?

A. That signifies the level of the water from the surface of the ground or the top of the curbing.

Q. Is that inches or feet, those figures?

A. That is feet and tenths.

Q. Well, I notice for example on May 4th, 1906, under that column appear the figures 40.3: Those also what?

A. That is the level of the water from our point of measurement on the top of the shaft, the surface of the ground.

Q. When you come down to September 27th, and the figures are 73.10, in the same column, that is 73.10 feet?

A. Yes, sir.

Q. What does that difference in the figures from May 4th to September 27th indicate?

A. Well, that is the rise and fall of the water in that shaft.

Q. The next column to the right, headed depth of water - "Depth of shaft to water, 7A", I suppose indicates in feet and tenths of a foot?

A. Yes, sir.

Q. The elevation of the water below the surface of the ground?

A. Yes, sir.

Q. "Weir No. 5, pumped water" no measurement. "Weir No. 6" also blank?

A. Yes, sir.

Q. Weir No. 7: What are those figures under the column headed "Weir No. 7, what do they show?

A. Those are miners' inches of water flowing over that weir.

Q. Where is weir number 7 situated?

A. It is at the mouth of what they call the Lone Star Tunnel.

Q. The next column is headed "Weir No. 8" and shows what?

A. Those are measurements of water flowing from the Cucamonga Springs, on the east side of the red hill.

Q. And that weir No. 8 is situated where with reference to the brick hotel?

A. It is about 40 or 50 feet below the hotel.

Q. Do you know that water is measured at that weir, and what measurements of water are shown in this column under the heading "Weir No. 8"?

A. The water that flows from the springs on the east side of the red hill.

Q. And the figures here indicate the flow of water in what?

A. In miners' inches.

Q. Now, taking the columns next to the right, some seven of them under the same general caption "San Antonio Company's wells", what wells are there referred to?

A. Well from 1 to No. 6 are above 16th Street.

Q. I notice No. 14, that the column under the heading "No.14" is entirely blank: Is that because you made no measurements?

A. No, we made no measurements.

Q. Why did you make no measurements on that well if I may inquire?

A. Well there is no pumping being done there since I

started to take measurements.

Q. Where is that well No. 14? Describe its location?

A. Well No. 14, it is north of the head of tunnel No. 2 or the radio tunnel.

Q. Do you know what correspondence it has if any with what has been referred to as the big well?

A. It is the same one as the big well.

Q. When you say it is north of the head of the tunnel explain yourself, whether that well has any connection with the tunnel?

A. I believe they have connected it now, although I have never been down in to see.

Q. These other columns here, under the general head "San Antonio Company's wells, and subordinate or inferior headings No. 2, No. 3, No. 4, and No. 5, and so on, contain some entries here of the word "pumping": what do those words signify?

A. They were pumping water at the time of observation of dates

Q. Some other place there are some other entires besides "pumping"; it says in two or three places "San Antonio wells not pumping": I suppose that means what it says does it?

A. Yes, sir.

Q. State whether the entries there concerning pumping or not pumping, record the result of your observations on those dates?

A. Yes, sir; those are the results of observation.

Q. Now, at the right of this chart of tabulation are two columns: one headed "Hellman well No. 2" and the other "Artesian well No. 2": What do the figures in those

columns indicate?

A. The level of the water in those different shafts.

Q. In what? In inches or rods or what?

A. In feet and tenths of a foot.

Q. Well, explain: in the column headed "Hellman well No. 2" the first entry is of date May 3rd, 1907 and the figures are 4.10: what does that mean?

A. Well, there is a point of observation in the bottom of that shaft, which is 42.7 below the surface, and that is 4.5 below that point.

Q. What is?

A. It would be 4.5 below the top of the casing, in the bottom of the shaft.

Q. What is it that is 4.5 feet below that?

A. The level of the water.

Q. Well, state whether the same conditions are shown on the different dates as to the other figures in the column, following the one you have just described?

A. They are from the same point of observation.

Q. They show the depth to the water from that point of observation?

A. Yes, sir.

Q. In feet and tenths of a foot? A. Yes, sir.

Q. Now the last column "Artesian well No. 2" contains entries in regard to what?

A. That is the depth of the water from the top of the curbing, or point of observation in feet and tenths.

Q. Where is this Hellman well No. 2? Where is it situated?

A. Well, it was at the head of the Y tunnel, that is on

the east side of the red hill I believe.

Q. Is this it here to which I point?

A. This is the east well over here.

Q. I want to know the well you call Wellman well No. 2?

A. That is the west one.

Q. That is the one at the head of the west prong?

A. The west prong of the tunnel; yes, sir.

Q. Artesian well No. 1, where is that situated?

A. That was situated on what we call the 90 acre tract of the Cucamonga Water Company I believe.

Q. Was that well used for any purpose at the time you made your observations?

A. No, it is not connected up with any tunnels or water works

Q. How is it situated with reference to the red hill?

A. Well, it is you might say on the top of the red hill, at that point, practically; pretty well up.

Q. I notice in this chart or tabulation concerning which you have been testifying, under the column of "Name of Observer" that a few of the entries or spaces bear the name "E.T. Wright": Did you assist Mr. Wright in making any of those observations, which bear his name, so that you can testify here whether they are correct or not? If not we will ask Mr Wright about them

A. No, I did not assist him on those dates.

MR. BRITT: So far as the witness has proceeded, with the exception of a few entries there made under the name of E.T. Wright, we will offer this tabulation in evidence, as containing the result of his observations, during the time covered by the several dates entered on his chart.

MR. CHAPMAN: I would like to ask the witness a few questions.

Cross Examination.

MR. CHAPMAN, Q. Who do you say assisted you in making the measurements to which you have testified?

A. I had no assistant.

Q. How were the measurements made?

A. With a steel tape and a rule.

Q. And the measurements of the water?

A. They were made with a two foot rule.

Q. The water that was flowing over the weirs, how did you make the measurements?

A. Measured it with a rule.

Q. And in what way?

A. By taking the depth of the water at established points near the weir.

Q. And then what?

A. Then calculated the same and sent it in to Mr. Wright.

Q. How?

A. I calculated the same and sent it in to Mr. Wright.

Q. By what formula did you make the calculation?

A. The Francis Formula.

Q. What is that?

A. That shows the amount of cubic feet persecond flowing over a weir. under contract on or without contraction.

Q. What was the width of the weir in this tunnel in which there were two or three weirs in the tunnel?

A. Well, the weirs varied in width, because they were changed to suit the conditions.

Q. Have you given the measurements on the diagram that you

have there, or that tabulated statement, or have you given the result?

A. That is the result of the measurement.

Q. How long have you been engaged in that business?

A. I couldn't state exactly; I have been working at it on and off, for 22 or 23 years, surveying.

Q. Whereabouts? In this section of the country?

A. Yes, sir.

Q. Who made this tabulated statement?

A. I believe that is from the office of F.T. Wright.

Q. From what did he make it?

A. From measurements that I sent him.

Q. In what form did you send him the measurements?

A. Some of them calculated, and some just the depths of the water over the weir, and the widths of the weir.

Q. Any other data?

A. The depths of the water in the shafts, the elevation of water; yes, sir.

Q. I mean for the measurements of the water over the weir, the amount flowing there, did you give him any other data, than simply the width of the weir, and the depth of the water on the weir?

A. In some instances; in some instances the total amount calculated.

Q. I am speaking of those instances, in which you did not send him your own calculation, but simply the depth of the water on the weir, and the width of the weir, when you did not make the calculation yourself, did you give him any other data from which to make it?

A. Yes, sir; if it was a contracted weir or a suppressed weir

Q. Who placed those weirs there?

A. They were placed there by the San Antonio Water Company

I believe placed number one and two; weir No. 6, I

could not state as to who placed that one. No. 7 was

placed by the Cucamonga Water Company.

Q. Wherabouts did you say that was?

A. No. 7 was at the south of the Long Star tunnel.

Q. The Cucamonga Water Company's tunnel?

A. The Cucamonga Water Company's tunnel; yes, sir.

Q. Were there any changes made in that place during these

measurements that you made?

A. No, sir.

Q. It remained the same all the time?

A. The same all the time.

Q. In this left hand column I find that the name of the ob-

server is C.M. Johnson, and above the heads of the diagram

it is E.T. Wright: Did you have anything to do with those

measurements under the heading C.M. Johnson and E.T. Wright?

A. Under the heading C.M. Johnson I did; under the heading

E.T. Wright, no; I did not assist him in the measurements.

Q. At another place, at two places or three, it is C.M.

Johnson's and E.T. Wright's name both appear: were those

made jointly?

A. I think you will find that at separate dates.

Q. Yes, November 3 and November 10, and then in January 1908?

A. Well, January 7th.

Q. What is the next one after the 7th?

A. After the 7th - well, January 8th was inserted which we

quite before January 7th; January 12th is the last.

Q. Did you make those measurements?

A. I made the one January 5th, and January 12th, 1906.

Mr. Wright made the measurements January 7th.

Q. This weir No. 1 and weir 2 are both in the tunnel are they

A. Yes, sir; tunnel No. 2

Q. That is the main tunnel?

A. Yes, sir.

Q. Are those alone together?

A. Yes, sir; in the same box .

Q. What water does that measure? Where does it come from?

A. Part of it flows in Ontario I presume, and part Cucamonga Water Company.

Q. Which one of the weirs is it that measures the water that goes to the Cucamonga Water Company?

A. No. 1 is the water Cucamonga weir.

Q. Weir No. 7 is that the weir that measures the sum total of both, or do you take the sum total from the two weirs number one and two?

A. Weir No. 7 is at the south of the Cucamonga Company's tunnel- the lower tunnel.

Q. And adding the totals here, you just simply add the second point over the two weirs together?

A. Numbers one and two; yes, sir.

Q. Is there any other point of measurement alone there?

A. There is, yes, at the shaft we call 4 and 1A, there is a combination measuring box in there, but that has been submerged since I started to measure.

Q. The shaft 4 and 1A , May measure that?

A. That designates the level of the water, from the surface down to the level of the water in feet and tenths.

Q. In these measurements of the wells all measure the water from the surface of the ground to the water level?

A. In all the wells; yes, sir, except William No. 2, which is taken from a point down in the shaft.

Q. Does that give the depth from the point you speak of to the water?

A. To the water level.

Q. These measurements of wells are not of the level of the elevation of the surface of the water above the sea-level?

A. No, sir.

Q. But just the depth from the surface to the water?

A. Yes, sir.

Q. So you could not tell anything about the relative elevations of the different wells by the measurements given here?

A. No, sir.

MR. CHAPMAN: That are you offering now?

MR. WHITT: I am offering in evidence this tabulation, except those portions of it, those measurements which are there measured down by Mr. Wright.

MR. CHAPMAN: Q. Now, we ask you Mr. Johnson, have you ever compared this table with the notes of your own observation?

A. Yes, sir; I looked it over thoroughly and checked it.

Q. It is correct is it?

A. Yes, sir; it is correct.

MR. CHAPMAN: That is all.

MR. WHITT: I will ask this to be marked Plaintiff's

Exhibit 11; the Court will observe it is continuous with plaintiff's Exhibit 5; commences just about where plaintiff's Exhibit 5 left off.

Redirect Examination.

MR. WHITE, Q. Have you ever been up and down the Cucamonga wash between the red hills or Cucamonga Springs, and the mouth of the Cucamonga Canyon in the north?

A. Yes, sir; at different times.

Q. State whether you have been in the mouth of the canyon in times when there was any considerable stream of water flowing from the mountains down to the alluvial lands below?

A. Yes, just after a rainfall, several times.

Q. Can you say when you began to observe the flow of water from the canyon?

A. I couldn't say to the dates exactly; I have made several trips to the canyon, during the winter time and also in the summer.

Q. Dry years and wet years?

A. --ne, sir.

Q. And commencing about what time? When did you first begin to observe the flow of water out of the canyon there, when there was any to flow? You said you had been in that country since '85 or '86?

A. '85 or '86; yes, sir; well, I have known it at different times all through those periods.

Q. Now, have you ever been up in the canyon toward the top of the mountains where the creek heads?

A. Yes, sir; I have been up over that; they call the second falls in Cucamonga Canyon.

Q. From what source does the water come which appears on the plain, or comparatively flat country, at the mouth of the Chicamauga Canyon?

A. Well, it is from rainfall, and snow that is carried in the hills and Chicamauga Mountains.

Q. What have you observed as to the extent of the stream which in times of considerable rainfall emerges from the Canyon at the foot of the mountain?

A. Well, there has been times when it has been impossible to cross the stream in a buggy from one wall to the east, or east to the west; I should judge it is 30 or 40 or 50 feet wide in places; there is a considerable volume of water coming down

Q. Describe the slope of the bed of the stream at the place where it debouches from the mountains on to the plain below?

A. Well, there would be a slope more probably of - I have never leveled it carefully - possibly over five hundred feet to the mile.

Q. Does water flow pretty swift there in times of rainfall?

A. Yes, sir.

Q. Now, what have you observed as to the extent to which the water disappears, in and has been lost in the debris cone, at the mouth of the canyon?

A. Why, it will disappear quite rapidly. This is according to the volume of water; some years it flowed a considerable distance from the canyon before disappearing altogether.

Q. Now have you noticed about the extent of the disappearance of the stream, between the Chicamauga Trough, and the mouth of the canyon of an average?

A. Well, where the stream is very heavy, of course it travels

over quite a bit of country, whereupon it sinks before it gets to the springs.

Q. State what you have observed if anything, as to the continuity of the channel or the surface of the ground, between the mouth of the canyon and the Cucamonga Springs?

A. Well, it flows in a southeasterly direction from the mouth of the canyon till it passes - that is the original bed of the Cucamonga and passes the springs - perhaps through what they call the red hill.

Q. When that stream disappears describe the manner of disappearance, whether it peters out first above or below, peters out at the mouth of the canyon first, or ceases flowing down about the base line, or at the Cucamonga Springs first?

A. It ceases flowing below, and gradually ceases towards the north.

Q. During that period of gradual cessation what have you noticed as to the receptacle for the water? It must go somewhere, I presume: what becomes of it?

A. I presume so; it goes into the ground.

Q. That is the nature of the ground across that strip traversed by the stream, where it gradually disappears, between the mouth of the canyon and the Cucamonga Springs?

A. Seemingly gravel; some of it very open.

THE COURT: You are only referring to the surface.

MR. WATT: I am asking the court the surface.

Q. Have you ever made any borings, or assisted in making any borings or diggings beneath the surface over that strip of territory, between the Cucamonga Springs, and the mouth of

the Cucamonga Canyon?

A. Yes, sir; I have.

Q. Where?

A. Why, I have worked in the channels there myself, and have supervised the tunneling considerable of the Cucamonga Tain Canyon.

Q. I was asking you about the country between the Cucamonga Springs and the mouth of the canyon?

A. Well, some of that would lay between - not direct in the bed of the channel,- off to the side in the red hill.

Q. What have you noticed in that space of territory there about scattered channels if anything, whether the channel is straight, either a straight or a sinuous well-defined water course, or whether there are a variety of channels, a diversity of channels?

A. Well, in some instances it is one way and some another; there seems to be marked channels in places, and as we get further along it all seemed to be in one bed.

Q. By further along what do you mean?

A. Further in the tunnel drifting.

Q. Well, I think you misunderstood me but that is all right. But I was asking you about the surface channel between the Cucamonga Springs, and the mouth of the canyon?

A. Well, they are composed of sand principally, gravel beds.

Q. State whether those channels are continuous, well defined marked by defined banks, or whether they ramble more or less over the surface of the ground, between the Cucamonga Springs and the mouth of the Cucamonga canyon?

A. Well, the Cucamonga wash itself is fairly well defined;

There is branches from that where it has become fouled and spread out.

Q. Have you noticed there any indications of a debris cone at the mouth of the canyon, and thence spreading toward the plain?

A. I have been over some of it; yes, sir.

Q. Are you able to describe its dimensions? I don't know whether you made a sufficient observation for that?

A. Well, that cone will cover several square miles; I don't know just what the area is; I have never measured and computed it.

Q. State whether you acted as zanjero for the distribution of water around the red hill, and from the Cucamonga Springs?

A. I was zanjero from December 1902, until August of this last year, August first.

Q. Were you living there so that you remember - did you make such observation so that you remember the condition of the water on the east side of the red hill as far back as '05?

A. I couldn't say that I had made any very early observations later I have.

Q. Have you any accurate recollection now as to the time when the water began to disappear and dry up in the Cucamonga Springs and Cienegas?

A. It was several years after I was there that it commenced to dry up; I couldn't state the date exactly; some five or six years it commenced to diminish.

Q. When did you become zanjero?

A. In December 1902.

Q. You had never handled the water before that?

A. No, sir.

Q. For whom were you surveyor then?

A. The Cucamonga Water Company.

Q. Where were you receiving the water from the Etiwanda Tunnel?

A. From tunnels and wells, Cucamonga Water Company's property

Q. Did you handle any water for the San Bernardino Water Company?

A. No, sir.

Redirect Examination.

MR. CLARKSON, Q. You speak of the Cucamonga stream flowing between the red hills: what did you have reference to as the red hills?

A. Why there was a chain of red hills that you can see by the diagram there that lay on section 3 and 4.

Q. What diagram do you refer to?

A. This one here.

MR. SMITH: That you are looking at is marked Plaintiff's Exhibit 1.

Q. Now, on this Plaintiff's Exhibit 1 what represents the red hills that you speak of, and between which the Cucamonga Creek flows?

A. Well, it is shown here and on that side.

Q. In section 4?

A. In section 4 and in section 3.

Q. Where now is the flow of the stream?

A. This point right here.

Q. Marked in blue?

A. Yes, sir.

Q. How far apart are the two red hills between which it flows.

A. Well, they are practically joined; there is simply a depression formed there by the water running between the two hills.

Q. What is the width of that depression between the two hills through which the water flows?

A. Well, the exact width of the wash itself,- the exact bed of the wash itself will vary all the way from 50 to probably 100 or 110 feet.

Q. Between the hills?

A. Between the hills, the bed of the wash.

Q. What part of the valley between those hills will that 100 or 110 feet cover?

A. Well, it covers from the - well, it runs through the hills; I don't know what area it will cover in running.

Q. I am talking more particularly about the place where the wash of the Chocolate Creek is buried between the two red hills. What I am asking you is, what is the distance from the base of one of those hills to the other?

A. As I say from 40 or 50 to 100 feet wide.

Q. North of those hills what is the character of the country?

A. It was considerably broken, consists of the main wash, with arteries leading into the main wash.

Q. How does the topography of that section compare with that place where those two hills are represented?

A. After you leave the red hills there is a gradual rise towards the mountains.

Q. Well, east and west what is the character of the country? Practically level?

A. It is practically level east and west; north and south

you have a fall.

Q. And this plain above the two hills, about what is the width of it from east to west?

A. Well, I don't quite understand that, what you want me to cover in that question.

Q. When you come out of the mouth of the canyon, the water then pours out upon this plain, or the gravel beds that lie at the foot of the mountain?

A. Yes, sir.

Q. Now, from east to west what is the character of that country? The stream is not walled in by mountains all the way as at this point of which you have been speaking?

A. No, sir.

Q. About what is the width of the tract through there to the mountains on either side of it, or are there any at all?

A. There are no mountains on either side after it leaves the canyons.

Q. How far is it from the Cucamonga Springs to the mouth of the canyon?

A. I have never measured; I should judge four miles.

Q. Where did you say the water first begins to disappear, on the surface of the ground in the Cucamonga creek?

A. It depends on time time of year ; different times, from the mouth clear to the springs; at times it sent by the springs.

Q. It runs by the springs?

A. Yes, sir.

Q. How long does it continue to do that? How late in the season?

A. These later years it is not running by there so much as heretofore; I have seen it run there through the bed of the wash up till June, past the Cucamonga Springs; that has been probably 14 or 15 years ago; I don't remember exact.

Q. You say in recent years it does not run through there so long: about what time of the year does it run through?

A. Well, it has run as late as May

Q. What year?

A. In 1906 - in 1905 and '06, I believe it has run past there.

Q. As late as May?

A. Yes, sir.

Q. When it begins to dry up entirely, at what place along the Cucamonga Creek does it dry first?

A. It commences at the lower end and dries towards the mountains.

Q. About where does it disappear first?

A. It will disappear,- it depends on the amount of water coming down,- at the lower end it disappears first, and goes towards the hill.

Q. Well, does it depend on the quantity of water that flows down? Don't it begin to disappear at about the same place all the time?

A. That I couldn't state; I have never made any observation direct to that.

Q. Does it disappear below the red hills first, or does it disappear above that place?

A. It disappears below the red hills first.

Q. Then gradually the dry land recedes up to the mouth of the canyon?

A. Yes, sir.

Q. You say that the cause of the disappearance of the water is that it goes into the ground?

A. Yes, sir.

Q. Does evaporation have nothing to do with it?

A. Presumably so; yes, sir.

Q. Don't it have a great deal to do with it?

A. Not in the season that the water is running there it wouldn't have a great effect.

Q. I mean when it begins to disappear?

A. Well that would depend on the season, whether it was exceedingly dry or damp.

Q. Evaporation would vary ofcourse according to whether it was hot or cold, a dry wind or a humid atmosphere?

A. Yes, sir.

Q. But isn't evaporation very considerable all the time?

A. Not all the time, no.

Q. Have you ever made any tests of it to see what the amount of evaporation was?

A. Not any direct tests no.

Q. Have you ever noticed whether there is a difference between the amount of water flowing there in the early morning and in the afternoon at three orfour o'clock?

A. Yes, sir; there is a difference.

Q. Much difference?

A. Not any considerable diference.

Q. About how much water flows down that stream in an ordinary average season, for the last four or five years, as late as April, in that place?

A. Well, there was very little water that would go down to the springs as late as that.

Q. Well, in March then? About how much flows there in March of the average season of the last four or five?

A. Well, I have never computed that so that I could say, reasonably, on it; there has been some water, but I never took exact measurements on it, and I couldn't state the quantity.

Q. Never made any measurements of it?

A. No measurements direct no.

Q. Did you make any approximations of it?

A. No, sir; no approximations.

Q. Do you know about what the grade of the country is, what the inclination is, below those red hills toward the south?

A. Well, it will drop off probably 100 feet to the mile. As you go further down in the valley -

Q. I mean to the hill?

A. Direct there it would be about 140 feet to the mile.

Q. The water from that creek is all diverted now, either between those red hills, or before it gets very far into the valley?

A. Yes, sir.

Q. And taken in what direction?

A. Taken from the Chcamonga Springs, taken to the east.

Q. You say that you have been distributing water for the Chcamonga Water Company from December, 1902, until when?

A. From December, 1902, until August first, 1907.

Q. And that you were superintending the distribution of the

water from the tunnels and wells of the Cucamonga Water company?

A. Yes, sir.

Q. What tunnels and wells did you refer to?

A. Well, that would be from the Baxis tunnel, or tunnel No. 7, or Lone Star tunnel, as it is called.

Q. And what wells?

A. The wells from the 10 acre tract and the Lone Star tract.

Q. Where is the 10 acre tract to which you refer?

A. It is on the east side of the red hill, or part of the red hill on the westerly side.

Q. The square that is marked?

A. Yes, this point here.

Q. Where is the Baxis tunnel located?

A. This line here designates it, the south, and it runs from this well 14.

Q. It runs through the 90 acre tract?

A. Yes, sir; through the 90 acre tract.

Q. What wells did you refer to in the 90 acre tract?

A. The Cucamonga Water Company's wells are all on the 90 acre tract; they have a system of wells in through here; very few flowing now, except the one at the combination division box, and two out on the tunnel No. 8.

Q. That one at the combination division box is numbered what if it has a number?

A. Well, I don't know as there is one right there at that division box; it is further in the tunnel.

Q. Is that the one you refer to as the big well?

A. No, not the big well.

Q. The big well is further up the tunnel?

A. On the Ontario Power Company's land; yes, sir.

Q. The Lone Star tunnel is on part of the Cucamonga Water Company's property?

A. Yes, sir.

Q. And its wells are all on the 90 acre tract?

A. They have wells on the 90 acre tract; on the Lone Star tract.

Q. Did you distribute water for the Cucamonga Irrigating Company?

A. The Cucamonga Water Company.

Q. The Cucamonga Irrigating Company?

A. It is an irrigating company; yes, sir.

Q. Did you have anything to do with the distribution of the water of the Old Settlers Company?

A. No, none whatever.

Q. Those wells on the 90 acre tract, and the Lone Star tunnel and the Radio tunnel, constitutes all of the waters of which you had the management and distribution for the Cucamonga Water Company?

A. Yes, sir; 90 acre tract and Lone Star tract.

Q. How long did you say you had been acquainted with the diversion and use of the waters of the Cucamonga Creek?

A. Why, since '82; that is not directly; indirectly.

Q. Who was diverting the water in 1882, and where was it being used then?

A. It was being used by the Cucamonga Colony.

Q. About what extent of country did that cover?

A. I don't know the acreage exactly at that time.

Q. Were the places different from where the water is now used?

A. Some of them yes.

Q. And north of the Cucamonga Springs?

A. Yes, sir.

Q. And east?

A. Yes, sir.

Q. Has it still been continuously diverted, and used for the same purposes and irrigated the same country ever since?

A. Yes, sir.

Redirect Examination.

MR. BLIFF, Q. Let me understand what you mean by the Cucamonga Colony and the use of the water the same now as it did when you first had some indirect notice of it in '82. When the water ceased to flow in the Cucamonga Springs, I suppose you don't mean that anybody was using it then, the same as they were in 1882?

A. Well, there has always been a small amount running from those springs on the east side of the hill.

Q. What do you refer to as the Cucamonga Colony?

A. Well, it would be comprised of Cucamonga, North Cucamonga and South Cucamonga.

Q. Do you know if Guy used water from the Cucamonga Springs on the Cucamonga vineyard?

A. The Cucamonga vineyard had a certain proportion of that water I believe and have to the present time.

Q. But you don't know what proportion. Do you handle the water for the Old Settlers Water Company?

A. No, sir.

Q. And you don't know what proportion of the water, or do

you know what proportion of the water that concern has been accustomed to use? I am speaking of the water from the Cucamonga Springs, the east side water?

A. Yes, sir; the east side; why they are supposed to have an equal division on it I believe up to a certain moon.

Q. Were you giving my accurate attention to the use that was made of the water, say twenty three or twenty four years ago, by the persons who used it?

A. No, sir; indirect.

Q. So far as any distribution of the water by you is concerned, it has been only in the last five or six years?

A. Since December, 1902.

RECROSS EXAMINATION.

MR. JOLIFFE, Q. Don't you know of the diversion of the water of that Cucamonga creek, by the Cucamonga Development Company, taken over on to the track known as the Iowa tract?

A. None of the spring water.

Q. Creek water, taking the water up near the mouth of the canyon?

A. That I couldn't say; I have never investigated that; never looked into it; the Iowa Colony I believe has some water from the Cucamonga Canyon, but as to the quantity I don't know.

Q. You have not been up to their works where they divert it?

A. I have been there; yes, sir; never measured the water.

Q. You know they have been taking the water from the Cucamonga creek, near the mouth of the canyon, for diversion on to the Iowa tract?

A. Yes, sir.

Q. How long has that continued?

A. Since my knowledge of the country there.

Q. Since about '85?

A. '85.

MR. HASKELL, Q. Do you mean to be understood as saying that Cucamonga Creek throughout the winter, for instance of 1907, flows a continuous stream of water from the mouth of the canyon, throughout the winter, down past the red hill?

A. Not a continuous stream; no, sir.

Q. How does this stream flow? Intermittently?

A. Yes, sir.

Q. And according to the quantity of storm water?

A. Yes, sir.

Q. nd ordinarily in such a winter as 1907 about how long would that stream flow after a heavy storm down past the red hill?

A. Well, I have not been over there each succeeding day; it seems to me I noticed it a couple of days this season of 1907, possibly three days.

MR. SMITH, Q. When you say this season, do you mean 1907-'08 or 1906-'07?

MR. HASKELL, Q. Do you mean this winter or last winter?

A. This winter.

Q. Well, I am speaking of last winter?

A. Well, I couldn't say as to the dates exactly; I only passed there several days, when I was passing over the bridge below San Bernardino Avenue.

Q. About how many days do you think that would continue?

A. I could not state as to the number of days exactly; several days.

Q. And then the water would cease to flow until another storm? would come, would it?

A. Yes, sir.

Q. And then it might flow again if the storm was heavy enough?

A. Yes, sir.

Q. In other words it would disappear within a mile or two of the mouth of the canyon wouldn,t it?

A. Yes, sir.

Q. Throughout the winter?

A. Yes, sir.

Q. And that is the case every winter isn't it?

A. Yes, sir.

MR. JOLIFFE, Q. Had the water flowed down the present winter as far as the springs? Did you notice?

A. I believe so; a couple of days.

Q. How far below the springs did it reach?

A. Well, in crossing on the bridge on San Bernardino Avenue I have noticed it crossing under that bridge; I don't know how far below it ran.

Q. Do you know whether it reached below the Santa Fe Railroad?

A. No, sir.

Q. About when was it that you noticed the water flowing by the bridge?

A. I couldn't state as to the exact time; it was after our first rainfall.

Q. Had you noticed as to that, after this recent rain which

came a few days ago?

A. No, sir; I did not.

Q. You don't know whether it did then or not?

A. No, sir.

Q. About what was the volume of water when you saw it flowing by the bridge during the early part of the season?

A. There must have been 100 miners' inches of water flowing past that point.

Q. Do you know how long that continued?

A. No, I do not; I was over there two or three days and I noticed it flowing.

Q. How long after the rain was it that you noticed it last?

A. Well, just a day after the storm.

Q. Well, you say you saw it for two or three days I understand you to say?

A. Yes, sir; during the storm, and the day after I believe.

MR. BRITT, Q. In this tabulation that has been presented here as plaintiff's Exhibit 11, there are some entries under the head of those Base Line wells, 16th St. wells, of pumping: Did you make any measurements of the quantity pumped at those days?

A. No, sir; none whatever.

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F.T. WRIGHT.

F.T. WRIGHT, a witness previously sworn, being recalled for plaintiff, testified as follows:

MR. BRITT, Q. Referring to this paper, exhibit 11, whose handiwork is the tabulation itself?

A. I think it is a draughtsman in my office. The papers were

given to him by myself - the figures were given to him by myself; the papers were sent by Mr. Johnson to me and I calculated from the data furnished me, and put it in miners inches

Q. The foot measurements, the depth of wells?

A. They were taken from his papers just as he sent them in.

Q. They were not made in miners inches?

A. No, sir. That only refers to measurements of quantities of water.

Q. It appears here you were the observer on a few occasions: July 15th for instance, and again September 5th, and one later date?

A. July 15th, and November 5th, 1907, and January 7th, 1908 are the dates I measured.

Q. State whether the measurements entered in the several columns here following your name are correctly made?

A. They were.

Q. State whether the results of your own observations are correctly tabulated in this exhibit No. 11? A. They are.

Q. State whether the computations of the data furnished by Mr. Johnson, were made correctly, and whether they are correctly noted on this tabulation?

A. Well, I say they are; there just simply might be a fractional part, a hundredth of an inch error somewhere.

Q. Substantially correct?

A. They are correct, as far as that goes.

Q. Substantially correct? A. Yes, sir.

MR. WRITT: With the testimony of Mr. Wright we offer in evidence the remainder of the data now on this Exhibit No. 11, that which remained unverified from the testimony

of MR. ~~Wright~~ Johnson.

MR. CHAPMAN: Who did you say made that diagram, that table, who made the figures?

A. I think it was either my son or Mr. Jordan in my office; Thomas Jordan or George Wright; I don't remember which one made them; they are both working there.

Q. How did you say they got their information?

A. They got their information from the calculations that I made myself and put right into my note book, and made from Mr. Johnson's measurements sent in to me. The actual figures on there are not mine.

Q. Have you compared them with your work since they were made

A. Yes, sir; I have; the originals at least. This is a white print from the original tracing. I will say in addition that Mr. Johnson had one of the white prints for four days and put considerable time in himself at his house to see if they agreed with his own calculations and told me they were correct

MR. BRITT: We testified to that here.

Q. Did you make those measurements under your name there yourself? A. Yes, sir.

MR. BRITT: I will ask you MR. Wright to indicate at the head of the columns, the instances in which inches of water are meant, and instances in which feet and hundredths of feet are meant. (Witness does as directed)

Diagram admitted ~~xxxxxxx~~ in evidence marked Exhibit 11, inserted herein at page ....)

Here the Court takes a recess until tomorrow, Jan. 18, 1908, at ten o'clock A.M.

DEFENDANT.

IN THE

Superior Court

OF THE

County of San Bernardino

State of California

Cucamonga Vineyard Co.

Plaintiff

vs.

San Antonio Water Co.

Defendant

VOL. X.

Dir.

E.T. Wright, ...Dep.

I. BENJAMIN, Official Reporter

January 16th, 1[illegible]. Tenth Day.

-o-

MR. WATERS: Will the defendant admit that the plaintiff Old Settlers' Water Company was a corporation at all times mentioned in the complaint?

MR. CHAPMAN: Yes; I think we have set forth in the answer what it is, and the date of its incorporation.

MR. WATERS: That is deemed denied under the statute.

MR. CHAPMAN: We admit that the Old Settlers' Water Company is a corporation.

MR. CHAPMAN: Have you the date of the incorporation there; my recollection is that the time is averred in the answer.

MR. WATERS: Plaintiff now offers in evidence part of development of title of plaintiff Old Settlers' Water Company.

I assume that counsel will concede to the offer of chain of title as certified to by the Consolidated Abstract and Title Company of San Bernardino. They are all in the same form, and they all together constitute that 55.[illegible] inches.

MR. CHAPMAN: That is the same 55.[illegible] inches referred to in the resolution?

MR. WATERS: Yes, sir.

MR. CHAPMAN: Do your people all claim all under that same source?

MR. WATERS: Yes, sir; and claim under no other source.

Plaintiff Old Settlers' Water Company offers in evidence record from the recorder's office of the County of San Bernardino of each and every of the conveyances set forth and described in chain of title of F.G. Nichols, certified

by the Consolidated Abstract and Title Guaranty Company as produced and marked Plaintiffs' Exhibit 12.

I make the offer in this way to obviate the necessity of bringing the books here, but I make the offer just as though the books were here on the table.

MR. CHAPMAN: We make no objection.

MR. WATKINS: The same offer as to the chain of title of S.P. Kincaid, to be marked Plaintiff's Exhibit 13.

The same offer as to the chain of title of Francis G. Smith, to be marked Plaintiff's Exhibit 14.

The same offer as to the chain of title of W. T. Ashley, to be marked Plaintiffs' Exhibit 15. That also applies to the chain of title of Oscar Williams in that same exhibit.

The same offer as to the chain of title of W.H. Denham, to be marked Plaintiff's Exhibit 16.

The same offer as to the chain of title of Sarah Manchester, to be marked Plaintiffs' Exhibit 17.

The same offer as to the chain of title of A. Stinchfield, to be marked Plaintiffs' Exhibit 18.

The same offer as to the chain of title of John Hancock, to be marked Plaintiffs' Exhibit 19.

The same offer as to the chain of title of Mary Cunning, to be marked Plaintiffs' Exhibit 20.

The same offer as to the chain of title of C.W. Allen, to be marked Plaintiffs' Exhibit 21.

The same offer as to the chain of title of H. M. Kincaid, to be marked Plaintiffs' Exhibit 22.

The same offer as to the chain of title of Kate Maria Feron, to be marked Plaintiffs' Exhibit 23.

The same offer as to the chain of title of Elizabeth Smith, to be marked Plaintiffs' Exhibit 24.

The same offer as to the chain of title of Mary J. Moore, to be marked Plaintiffs' Exhibit 25.

The same offer as to the chain of title of I.L. Davenport, to be marked Plaintiffs' Exhibit 26.

The same offer as to the chain of title of Gertrude V. Waddle, to be marked Plaintiffs' Exhibit 27.

The same offer as to the chain of title of Sarah J. F. Clarke, to be marked "Plaintiffs' Exhibit 28.

The same offer as to the chain of title of E. P. Norwood, to be marked Plaintiffs' Exhibit 29.

The same offer as to the chain of title of Alice P. Southworth, to be marked Plaintiffs' Exhibit 30.

(All of the above are admitted in evidence and marked as designated in the offer as exhibits)

MR. CARNELL: I understand the attorneys on the other side are willing to stipulate a certain portion of this title to which I am about to refer. It is not certified to; it is a chain of title furnished by the Consolidated Abstract and Title Company.

Are you willing to stipulate that the United States of America by patent transferred or granted the Rancho Cucamonga to the estate of Liborio Tapia, as appears of record in the office of the County Recorder of San Bernardino County, of date the 14th day of December, 1872, and recorded the 3rd day of March, 1873, in Book A of

Patents at page 103?

MR. CHAPMAN: Yes, sir; the patent itself may be considered in.

MR. HARELL: And that by mesne conveyances the Rancho of Cucamonga became vested in Isaias W. Hellman?

MR. CHAPMAN: Yes, sir. That was? That he finally acquired the whole title on the 9th day of May, 1871.

MR. HARELL: By deed recorded the 9th day of May, 1871, in Book K of Deeds, at page 189.

MR. CHAPMAN: Yes, sir.

MR. HARELL: You stipulate that on that date the title to the whole Rancho was vested in Isaias W. Hellman is you not?

MR. CHAPMAN: Yes, sir.

MR. HARELL: I would like to be more specific to this effect: That such patent in full as recorded, and such conveyance in full as recorded are deemed in evidence and deemed read.

MR. CHAPMAN: It might appear that the deed to I.W. Hellman was prior to the patent, but the patent will relate back as it will show on its face. I will stipulate that the patent and deed are both in evidence and deemed read.

THE COURT: That stipulation inures to the benefit of all the plaintiffs and the intervenor?

MR. CHAPMAN: Yes, sir.

MR. HARELL: We offer in evidence under a similar stipulation to the one made with Mr. Waters as to the production of the record itself, a deed from Isaias W. Hellman to the Cucamonga Company, dated the 14th day of May, 1871, recorded the 18th day of June, 1871, in Book C of Deeds, at page 201.

Are you willing to admit that the Cucamonga Company

was a corporation on the 16th day of May, 1871?

MR. CHAPMAN: Yes, sir. That company was incorporated in San Francisco, and that is probably why we have not a copy of the articles here.

MR. HARVILL: Now, we offer a deed of the Tumacacori Company to Patricio Varalcomo, dated the 12th day of August, 1864, recorded in the office of the County Recorder of San Bernardino County, on the 4th day of January, 1886, in Book [illegible] of deeds, at page [illegible].

MR. CHAPMAN: You have not the description of the land here?

MR. HARVILL: No, sir; not here.

MR. [illegible]: Well, never mind; we will consider the deed in evidence.

MR. HARVILL: We offer in evidence a deed from the Tumacacori Company to R. T. Rubble, dated the 4th day of March, 1874, recorded the 7th day of December, 1886, in Book [illegible] of deeds, page 430, of the records of San Bernardino County.

These offers are all from the records of the County of San Bernardino Recorder's office.

MR. CHAPMAN: I have that deed here.

MR. HARVILL: Now we offer in evidence the decree of the Superior Court of the City and County of San Francisco, State of California, recorded on June [illegible], 1[illegible], at 10 o'clock and [illegible] minutes A.M. in Book 1[illegible] of deeds, page [illegible], in the office of the County Recorder of San Bernardino County, which is a decree of distribution in the matter of the estate of L.T. [illegible] deceased; that proceeds to distribute the property heretofore deeded by the Tumacacori Company to L.T. [illegible], to Leland [illegible] Turner, George [illegible]

Rumale, and Eva T. Rundle, and Matthew Turner - no -

MR. WATTS: Were was that estate pending?

MR. RANDLE: In the Superior Court of the City and County of San Francisco.

MR. RANDLE: Then we offer a deed dated December 19th, 1899, recorded February 26th, 1900, 9:30 A.M. Book 267 of deeds, page 40 of the records of the County of San Bernardino said deed being from Ashland M. Turner, George H. Rundle, Charlotte H. Chapman, Eva T. Andrews, undivided one-half owners, and Matthew Turner, undivided one-half owner, to Daniel H. Milliken.

Then we offer a deed recorded in the office of the County Recorder of San Bernardino County, recorded February 26th, 1900, at 11:01 A.M. Book 267 of Deeds, at page 41, from Daniel H. Milliken, to Matthew Turner.

Also a deed recorded February 26th, 1900 in the office of the County Recorder of San Bernardino County, in Book 267 of deeds at page 42, from Daniel H. Milliken, to Ashland M. Turner, George H. Rundle, Charlotte H. Chapman, and Eva T. Andrews.

Now, in regard to the George T. Bacon property I think I had better show you this abstract, to save time, and let you examine it; and there may be, after a further examination on my part one or two other deeds in relation to this Rundle property that I may want to introduce later.

Now, in that deed from the Cucamonga Company to Richard T. Rundle that we have just offered, there is a peculiar expression in regard to the amount of water. Are you willing to stipulate that that has always been treated and considered

as one inch to ten acres?

MR. CHAPMAN: What right is that?

MR. HASKELL: It is the same kind of deed that Mr. Masers' clients insisted upon one inch to eight acres and got it.

MR. CHAPMAN: I think that was the case; yes, sir.

MR. HASKELL: You are willing to so stipulate?

MR. CHAPMAN: Yes, sir.

MR. HASKELL: I think that is all I have just now, until after you have examined that abstract.

MR. STEVENS: Was that deed that you referred to then vested title in Mr. Hellman dated May 9th, 1871, recorded in Book K, at page 1[illegible]?

MR. HASKELL: Yes, sir.

MR. STEVENS: In behalf of the Cucamonga Vineyard Company, and the Cucamonga Land and Irrigation Company we offer in evidence a deed from Isaias W. Hellman to the Cucamonga Vineyard Company, dated June 3rd, 18[illegible], recorded June 18th, 1[illegible], in Book 21[illegible] of Deeds, page 37[illegible]. And the record of that deed may be considered in one read?

MR. CHAPMAN: Yes, sir.

MR. STEVENS: That is the deed through which the title came to the Plaintiff the Cucamonga Vineyard Company.

We also offer in evidence a deed from Isaias W. Hellman to the Cucamonga Land and Irrigation Company, dated April 2[illegible]th, 1[illegible], recorded April [illegible]th, 1[illegible]95, in Book [illegible] of deeds, page [illegible].

MR. CHAPMAN: What land or water did those deeds purport to convey?

MR. STEVENS: This last deed purports to convey a tract of

land described in the complaint, as belonging to the Cucamonga Land and Irrigation Company.

MR. CHAPMAN: That is the 524 acre tract?

MR. STEVENS: I really can't tell you that. There are two distinct tracts represented; one owned by the Cucamonga Vineyard Company, and the other by the Cucamonga Land and Irrigation Company.

MR. BRITT: The 524 acre tract is the Land and Irrigation Company, on which the water rises.

MR. STEVENS: Yes, the other deed is as to the Cucamonga Vineyard Company; we might have the same stipulation with reference to that record being considered in evidence and read?

MR. CHAPMAN: Yes, sir.

MR. STEVENS: Will you admit that the Cucamonga Vineyard Company, and the Cucamonga Land and Irrigation company were respectively corporations at all the times as alleged in the complaint, as therein set forth. It is denied for want of information.

MR. CHAPMAN: The Cucamonga Vineyard Company articles I have here, organized in 1887.

MR. STEVENS: I think that is correct.

MR. CHAPMAN: Do you want the articles to introduce?

MR. BRITT: Have you got them here?

MR. CHAPMAN: Yes, I have a copy of them.

MR. BRITT: Let us see them.

MR. CHAPMAN: What other company did you say? The irrigating company?

MR. STEVENS: Land and Irrigation Company.

MR. CHAPMAN: The articles I handed you, what were those?

MR. [illegible]: This is the Vineyard Company.

MR. CHAPMAN: I think the incorporation of the Land and Irrigation Company is admitted in the pleadings.

MR. BRITT: That is all right; that admission seems to be sufficient, that is admits and that it fails to deny.

MR. MAXWELL: In reference to the records that I offered in evidence this morning, are they considered in and considered as read in evidence.

MR. CHAPMAN: Yes, sir.

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E. T. WRIGHT.

E. T. Wright, a witness previously sworn, being recalled by plaintiffs, testified as follows:

MR. BRITT, Q. State whether you are acquainted with the situation and confines of the tracts of land which are described in the third amended complaint of the plaintiffs here? I am not speaking of the plaintiff Old Settlers' Water Company, but rather of the two companies, the Cucamonga Vineyard Company, and the Cucamonga Land and Irrigation Company. There has been some evidence here showing the boundaries and situation of those parcels of land.

A. Isn't that shown upon a map which was introduced here.

Q. There was a map introduced yes; it has not been on the board during the present session. I ask you if you are acquainted with those bodies of land?

A. Yes, sir.

Q. How long have you been acquainted with them?

A. Since 1888.

Q. There is evidence here of a chain of title connecting with the grant of the Cucamonga Rancho patent from the United States to the estate of one Tapia: I will inquire if you are acquainted with the situation of the Cucamonga Rancho, the large body of land known by that name?

A. Yes, sir.

Q. State whether or not these lands of the Cucamonga Vineyard Company and the Cucamonga Land and Irrigation Company, respectively, and to which your attention was directed, come within the exterior boundaries of the Cucamonga Rancho?

A. They do.

Q. Now, there is a description in the complaint of these lands by sections and fractional sections, as if they had been parts of the public domain, and surveyed under authority of Congress: Do you know how that happens?

A. Why the rancho was evidently subdivided into sections.

Q. I thought you had something personally to do with it.

A. Well, I did do it over again, but not the original thing; I found the Base Line sections were all run through the Rancho when I commenced working in 1885; and there was also a section corner, and accepted, by the winery there, inside of the grant; it was not set by the United States Surveyor, because I ran that into sections, but I utilized the Base Line, as it was run, and that one section corner by the winery.

Q. State whether or not your subdivision into sections and fractional sections was made to conform with the adjacent lands outside the grant, the surveys of lands contiguous to the grant?

A. Yes, sir; on the east and south it was all sectionized, and these conform to the government sections.

THE COURT, Q. It conformed to the government survey?

A. Yes, sir.

MR. BRITT, Q. Do you know what the extent of the grant is towards the north there? How far it extends with reference to the Cucamonga Canyon?

A. Yes, sir; I know where it is on the ground, although I have never re-run the thing; the ranch line shows as you pass it; it crosses the mouth of the canyon just to the south of what you would call the Sandoz place, right on the brow of the hill.

THE COURT, Q. Do you mean the mouth of the Canyon is on the grant?

A. It is if the mouth of the canyon is close to the Sandoz house; coming down the side of the hill you are on government land; it is within half a mile of there the grant line goes.

MR. BRITT, Q. The water of the stream is discharged on to the grant, the lands of the Cucamonga grant, about how far from the mouth of the canyon at the foot of the mountain?

A. Well, it depends a little on what you call the mouth of the canyon; it really discharges on the grant line, at the mouth of the canyon, it is practically.

Q. Now, between that point, and the Cucamonga Springs here, and the lands of the Cucamonga Land and Irrigation Company, is there any intervening government lands, or lands which intercept the continuity of the grant?

A. No, sir.

Q. You said you had been acquainted with those lands since 1885: In what capacity were you there first and did you become acquainted with them originally?

A. In 1885 I became quite well acquainted with them, by being one of four that purchased ~~four~~ seven thousand acres partly in the grant and partly outside, and one half of the water flowing from this 524 acre tract or the springs.

Q. From that time, 1885, until these two corporations received a deed from Hellman, about 1895,- I think ~~xxxxxf-~~ ~~xxx~~ - or deeds from Hellman about 1895, who was in possession of this 524 acre tract?

A. Why, Mr. Summers was in possession as foreman for I.W. Hellman, John G. Downey, I.W. Hellman, B. Dreyfus, and O.W. Childs, each owning a one-fifth interest.

Q. Well, he was there - -

A. As foreman for them.

Q. Did he have any possession apart from his employees?

A. Not at all, except as working for those five individuals.

Q. Do you know anything about what was done with the tract known as the Cucamonga Vineyard, at that time, commencing in 1885?

A. Mr. Summer was also there, working for four of those parties; O.W. Childs never had any interest in the vineyard; the other four parties each owned a fourth interest in the vineyard at that time

Q. What use was made of the vineyard tract?

A. Why, there was a vineyard of from three to four hundred acres, and they irrigated it from the water flowing from the 524 acre tract, and had a winery there that was making wine,

and some other fruit trees on the place, not so very many, but the main thing was the vineyard.

Q. During the irrigating season what do you know about the use of the water in 1888, and thenceforward until the present time, on the two tracts of land?

A. They used one half of the water rising on that 524 acre tract to irrigate the vineyard, and for alfalfa, and some years they had some little corn, and also for the fruit trees that there were; and they continued using it as far as I know of, to the present day, one-half of whatever arises on the land.

Q. The sources from which that water rose bore what name? Any general collective name?

A. They were known when I went there as the Cucamonga Springs, and nearly - a larger portion or more,- two thirds at least, came down the creek; and the first year we were there and had an interest in the property, a thirty inch pipe line was built, in the Fall of '[illegible] or early in '8[illegible], to get the water out by the Mountain View Hotel, to divide it up between the two companies.

Q. Now, reference is made here to the 524 acre tract: State whether it is the same tract which is marked on this map Exhibit 2, as 526.97 acres?

A. I mean the same tract; they used to call it 524 acres until a survey was made and it was found to be 526; that is the same tract I am referring to.

Q. That 30 inch pipe line has been referred to several times in the course of the evidence. Will you point it out on this map Plaintiff's Exhibit 2?

A. It commences right at the edge of the wash marked here "head of 30 inch pipe line", and runs for about 1000 feet down to a point just northwest of the reservoir, and below the Mountain View Hotel; the original contract was for 1000 feet of pipe.

Q. Is that Mountain View Hotel you speak of, the same building that has been referred to in some of the evidence as the brick hotel?

A. Yes, sir; the same building.

Q. Now, in what year was that 30 inch pipe line constructed?

A. Either in the Fall of '85, or the Spring of '86, I couldn't tell which.

Q. State whether or not that pipe line continues until the present day to be a conduit for the conveyance of water there?

A. Yes, sir.

Q. What part of the water of the Cucamonga Springs was in those earlier days taken into the 30 inch pipe line?

A. All of the Cucamonga Springs coming from the - what is known as the creek water was taken in at once when it was built.

Q. And what was done with it?

A. There was a division box at the end of the 30 inch pipe line, and it was divided, half going into the reservoir, or at least turned to the Cucamonga Vineyard and Irrigation Company, and the other went through a 22 inch pipe line over to Hellman Avenue, for the benefit of the Cucamonga Water Company, and Class A and Class B.

Q. This half that was not taken over to Hellman Avenue, was it utilized at once on the construction of the pipe line, or

had it been utilized before?

A. It had been utilized before and they continued utilizing it; before that pipe line was built there was a wooden flume, what we called of a temporary nature, that brought the water out.

Q. At the time when you first became acquainted with the land there, and the water, state whether irrigation was practiced, and whether the products of irrigation were apparent on the ground? When I speak of products of irrigation, I mean irrigated fruits of vines or crops?

A. Well, the main irrigation was the vineyard; there was three to four hundred acres of vineyard which was all irrigated entirely; and ofcourse it produced grapes, and they were manufactured by the winery on the ground there; and also the water was used as a power, from the reservoir down to the winery, to run the machinery of the winery; and there was alfalfa planted above the Santa Fe road, quite a little bit, for some years before the vineyard that is there now was planted.

Q. I think it has already appeared in the evidence that you are an engineer by profession, a civil engineer and hydraulic: If it has not so appeared I will inquire if that is so?

A. Yes, sir.

Q. Do you know how to measure water?

A. Yes, sir.

Q. Did you have that knowledge in 1880?

A. Yes, sir.

Q. Did you make any measurements of the quantity of water discharged from the Cucamonga Springs at that time in 1880?

A. I don't think so; I think my first measurement was made in 1887 or 1888.

Q. Have you any memoranda which show the measurements made then, and where?

A. Yes, sir; I have memoranda.

Q. Well, let us know the year of the measurements you made: I am not referring to the later measurements which show on this tabulation.

A. I will have to refer to this sheet that I have in my hand to refresh my memory. I couldn't remember it otherwise.

Q. Any memoranda you have made by yourself that you know to be correct?

A. The first measurement I made was July 13th, 1889.

Q. Where was it made?

A. It was a measurement made at the division creek box, at the end of the 30 inch pipe line, which is a division box above the reservoir.

Q. Was that the distance of a thousand feet from the intake of the pipe?

A. Yes, sir.

Q. Very well, what did you find?

A. I found there was 184.38 inches then flowing.

Q. That was in the Summer of 1889?

A. That was July 13th, 1889.

Q. What water did that include, water from what source?

A. That included simply all the water that we gathered, at least that we could gather, from the surface, from the creek.

Q. At that time was there any so-called developed water from the tunnels?

A. Not included in that portion, not included in that measurement.

Q. How did that quantity of water correspond with the ordinary summer flow at that time, take other seasons?

A. I think it averaged about the same; although it was considerably less than it was measured three years before by Culver, as testified to by Mr. Lynch; and it was considerably less than it was the following year as measured by Culver and myself, but take the period of five or six years, it was about the average, probably.

Q. At that time was there any other water being collected from the Cucamonga Springs, and used for irrigation, other than that which you measured on July 14th?

A. Yes, sir.

Q. What was it?

A. There was a large body of water collected at that time at the mouth of what is called here the Y tunnel, and that was all used, one half for the vineyard people and the Irrigation Company, and the other half for the settlers and the Cucamonga Land and Water Company.

Q. The first half that you mentioned was used where? On these lands that you have been describing, the Cucamonga Vineyard Company's land, and the lands of the Cucamonga Land and Irrigation Company?

A. Yes, sir; one half of the water.

Q. Have you measurements made about the same time of that quantity of water?

A. I have a measurement made the same day.

Q. What was it?

A. 168.57.

A 165.57.

Q What was it?

A 165.57 miners' inches.

Q Where was that measurement made?

A That measurement was made at what is called on this map, exhibit 2, sand box, at the head of the 16 inch pipe line; it included the water from the Y tunnel, and also from the cienega that the Y tunnel flowed through; there was an open jointed pipe that brought the water into that sand box and collected water also.

Q State whether or not any of this water involved in these two measurements was pumped water, or whether it was all gravity water?

A No, sir; all gravity water flowing from the Y tunnel, and from the creek and the cienega.

Q There was no pumped well being discharged into either of those pipes where the measurements were made?

A No, sir.

Q In those days,- I am speaking of the period from '8[illegible] to '89, what did you observe as to the vegetation growing on this creek, on the 526.97 acre tract, and I am directing your attention to the channel or wash marked on the plaintiff's Exhibit 2, on the east side of the red hill,- That is where it is situated, isn't it on the east side of the red hill?

A Yes, sir.

Q Well, now I will ask you about the manifestations of vegetable growth, the trees and brush, and other plant growth, if any?

A. For 1500 feet above the intake to the 30 inch pipe line it was filled with alders and growth of trees, and on either side, fairly well represented on Plaintiff's Exhibit No. 2, by large white spots intended to represent cienegas, cienega rather, that you couldn't walk over, unless by jumping from point to point, and even then it was hard in some cases.

Q. At what seasons of the year was that so?

A. At all seasons of the year, summer and winter; more wet in winter though.

Q. State whether you observed the nature of the channel of the creek, extending up from the Cucamonga Springs to the mouth of the canyon, at the foot of the mountain range, in those times?

A. I don't know that in any of those years I have followed it from the Base Line north; I had from the 30 inch pipe line to the Base Line; and I had driven over it, crossed it at other time; I don't think I followed the channel particularly.

Q. Do you remember during the Summer season how far north the water rose in that channel, or wash, toward the Base Line

A. I never measured it but I should suppose from six to eight hundred feet, possibly a thousand feet below the Base Line, where the first water began to appear; between six hundred and a thousand feet; it was dry at the Base Line during the summer season always in those years.

MR. CHAPMAN, Q. What years were you referring to?

A. From '[illegible] to '[illegible] or '[illegible].

MR. BRITT, Q. What have you observed with reference to the

discharge of water from the mouth of the canyon during seasons of freshet, if anything,- seasons of rainfall, what quantities and what become of it?

A. I think I have only made about two trips during the winter times to the canyon, or during the times of heavy rains. At each of those times, one was in the 90's somewhere, and the other was two or three years ago, there was a large body of water coming from the canyon; I did not measure it; simply the velocity was heavy, and it was 25 to 30 feet wide - between the two- and it sank before it got to the base line at those two times I refer to.

Q. Did you observe the nature of the surface soil between the mouth of the Canyon and the Base Line, just north of the Cucamonga Springs?

A. Why, it was simply gravelly open porous soil, ~~xxf~~ debris from the mountains.

Q. Did you observe anything of a debris fan?

A. Oh, yes, it shows for itself on the ground, that it is a debris cone, as you call it, first formed in a great many different small branches that you can trace down; several different branches you can call branches of the Cucamonga Canyon wash you can trace for miles.

Q. During the time you have known that territory which was the principal channel?

A. The first years when I was there, the principal channel was down -the east channel,- comes down through this creek; and then there was one set of years between 90 and '95, if I remember right that more water came down one of the other channels to the west of the red hills.

Q. How far to the west of the red hill? I would rather you would not confuse us here by using the plural; we are here chiefly concerned with a single red hill.

A. Well, these particular years this large body of water came down along the lines probably west of any of the lands on this map; it was really west of the 90 acre tract even; and I suppose it was turned there; we were told so; that is all I know.

THE COURT, Q. The main hill is on the 90 acre tract?

A. Well, the east edge of the 90 acre tract is part of the main hill.

MR. BRITT, Q. How far west of the 90 acre tract?

A. About a quarter of a mile; the wash shows there; it is a large wash on the ground there now, not cultivated even.

Q. Do you know how it shifted back?

A. I know that it shifted back.

Q. Was that during the last few years?

A. It shifted back so that during the last few years, during the heavy rains, the water has been coming through the east channel.

THE COURT, Q. Do you mean that it ran down that large wash west of the red hills?

A. Yes, sir; for two or three years there.

Q. There has been some talk of a wash or waterway between two red hills: You don't mean any of it flowed down there?

A. Some of it did, the branch; the main body of water for two or three years came down so that it did not touch any of the Cucamonga Fruit Land Company's lands; it touched the eastern part of the Ontario lands for two or three years; I

can't remember what years; along in the 80's sometime.

MR. BRITT, Q. For a number of years last past, do you know where the principal channel is situated?

A. Yes, sir; the channel comes down where it did when I first knew it, in the east channel. I have no doubt during heavy storms it goes both ways.

THE COURT, Q. Do you know whether it came back to the old channel naturally or whether it was aided artificially?

A. No, I don't know.

MR. BRITT, Q. You say there are a number of channels of varying dimensions on that debris fan or cone?

A. There are.

MR. BRITT: Could we agree on the admission of one of these United States Geological Survey Cucamonga Quadrangles, as being an approximately correct exhibit of the topography of the mouth of the canyon, and the country down as far as and below the Base Line

MR. JOLIFFE: I would like to see it.

MR. CHAPMAN: You can use it as a diagram for whatever it is worth. I don't know how accurate they are; I don't suppose they are exact, but about as close as anything else you can get.

What section does that cover, what area of land?

MR. BRITT: The scale is just about an inch to a mile, almost exactly an inch to a mile.

A. It covers something over a township and a half of land; it covers west to include all of San Antonio Canyon, and east to include the Kaiwanda Canyon; and most of the summit of the mountains, and south to as far as Chino.

MR. BRITT: We offer the paper in evidence, as being an approximately correct delineation of the topography of the country, in the neighborhood of the Cucamonga Springs, and the Cucamonga wash, the mountains, foothills and valley.

(Admitted in evidence, marked Plaintiffs' Exhibit 31).

MR. BRITT, Q. What do you know about the character of the mountain range in which this Cucamonga Creek has its rise, whether steep or otherwise, whether it is wooded or otherwise?

A. Well, it is very precipitous, the Cucamonga Canyon itself is, and there is comparatively little wood in it; I have been up a little over three miles from the mouth; that is the furthest I have ever been up in the canyon.

Q. Now, you spoke of the use of the water in 1880, and for a few years subsequently: state whether or not or how long afterward the water continued to be used in the same way?

A. I could not state the exact date of when the water ceased flowing there so as to deprive them from irrigating the vineyard, but I suppose it was about 1900 to 1901, possibly 1902, they got so short they couldn't irrigate the vineyard any more, and then they ceased.

Q. What I want to know, whether the water continued to be used, as long as there was any water to be used?

A. Yes, sir; it was used as long as there was water in sufficient quantity to use.

Q. Do you know by whom it was used and where?

A. Why, it was used by the Cucamonga Vineyard Company, and the Cucamonga Land and Irrigation Company after '88, when they organized the corporations; that is one half of the water.

Q. I believe you were concerned in both those companies at one time?

A. No, not as an owner; I was a commissioner that helped to partition them; afterwards they threw away the partition and organized into a corporation.

Q. What did you observe in those earlier times about the continuity of the flow of water in about the quantities you have described? This measurement was made in July: what I aim to inquire about is whether it ran about the same way, or whether it considerably diminished during the remainder of the season?

A. I think as a rule there was a small percentage less water in August than in July; and from that time on it increased; there was always more water in September than there was in July, but I think less in August; the balance of the year ofcourse there was more.

Q. What do you know about the history of what has been described here or called the big well, well No. 14, as marked on Plaintiff's Exhibit 1?

A. Why the well was first bored by either N.W. Stowell, acting under orders of the Cucamonga Fruit Land Company, or by the Cucamonga Fruit Land Company direct, and I think it was started in 1901; it might have been in 1900; I think I can furnish those dates exactly perhaps; when we went down we struck what we call a very large well; and our tunnel was some three hundred feet - I say "our" - I mean the Cucamonga Fruit Land Company's tunnel was some three hundred feet below the well; and then we spent a great deal of money in the next year or year and a half, trying to push the tunnel on

to the well; and at the time the Fruit Land Company sold out their interest in the land they had not yet reached the well at the level of the tunnel; they had reached the well with an upper tunnel and helped to syphon it off, but not reached the well itself.

Q. Do you know by whom that connection was made between the tunnel and the well?

A. t the present tunnel level do you mean?

Q. Yes, sir?

A. I don't know whether it was the Ontario Power Company, or the San Antonio Water Company; it was made by one or the other owners,- the owners that bought from the Cucamonga Fruit Land Company .

Q. I am asking you about your personal knowedge on the subject

A. No, I don't know.

Q. Do you know when the water was first taken out of that well into the tunnel in considerable volume?

A. Well, it was flowing before the Cucamonga Fruit Land Company sold; it was flowing through a tunnel, through a syphon, being syphoned down into the tunnel, and quite a volume going in at that time.

Q. Have you ever observed the quantity of water which was discharged from that well into the tunnel, say two years ago or four years ago?

A. Only from the measurements down below at what is called the cement box of the San Antonio Company; only from measuring there below, which would probably include other wells which connected before it got to that point; it is the big well of that neighborhood, and flowed more water to start

with than any of the other wells we have had anything to do with.

Q. What do you know about the history of the so-called 16th Street wells of the San Antonio Water Company to the north of the Base Line?

A. Why, I only know that the 16th Street well, which I think is well No. 1, of the San Antonio Water Company, was the first one, and that commenced pumping in '98 I think or thereabouts.

Q. Do you speak of the Haskell well?

A. No, the Haskell well was some years later; the Haskell well commenced pumping in 1899, and I think the Haskell well was the next one that they did commence pumping; that is my memory, but as far as keeping dates, most of these things I haven't got any dates, except just general remembrance to them

Q. What did you notice if anything as to the disappearance of water in the Cucamonga Springs, on the east side of the red hill, subsequently to the operations of the San Antonio Water Company in the Haskell well, and other wells north of the Base Line?

A. Why, the water in the Cucamonga Springs fell quite rapidly after 1899, as shown by various measurements.

Q. Any of these made by yourself?

A. Yes, sir; a great many of them made by myself, and some by others that I have got on this diagram.

Q. In dependently of those measurements that you have of the flow of water, what did you notice as to the surface indications on the ground, in the creek, and in the cienegas, and

moist land, on this large tract of 535.97 acres?

A. Why they began to dry up, began to dry out, and now they are all dry absolutely; I think there is no springs - well no springs on the property; there is simply some water land down in the valley of the creek, on the side, where the present water lies; but there is no springs on the mesa, or where the large springs are shown on that map; they dried up gradually; I think they were all dried four years ago, or five years ago perhaps.

Q. You have had occasion to be with the construction, I think of what is called the Y tunnel?

A. Well, I was one of the directors, and the engineer that run the lines; Mr. Lynch was the manager of the company at that time, and was on the ground all the time.

Q. Was the Y tunnel enlarged at any time?

A. It was not enlarged; it was completed in 1900, just after what was called the Chatterton breach; it was completed, and the upper part of it deepened ten feet, made it on a lower grade, and there was two fifteen inch wells bored some-thing like 100 feet at the end of the Y tunnel in the year 1900.

Q. That is when the two wells were bored?

A. Yes, sir; in 1900.

Q. One at each prong of the Y?

A. Yes, sir; at the upper end of the Y tunnel.

Q. Were those wells pumped?

A. I think the second year they were pumped a little; outside of that time they were never; in fact they flowed a great deal of water, and increased the water in that Y tunnel

that season materially.

Q. When was the Y tunnel first constructed?

A. In 1886 and finished in 1887, and deepened in 1900.

Q. You say the flow of water was somewhat materially increased at the time it was deepened?

A. Yes, sir.

Q. What became of the water finally in the Y tunnel?

A. I think, for about two years, it entirely disappeared, stopped flowing out from the tunnel itself, and the wells ceased to raise water high enough to flow out of the tunnel.

Q. I suppose these wells were of course bored wells?

A. They were bored wells some five hundred feet deep from the surface.

Q. Were they cased?

A. Cased with wood 12 inch pipe and cut at the water strata.

Q. Do you know anything about what is called the China Garden on that tract of land?

A. China Garden Springs we used to know it as, yes, sir.

Q. What sort of land was that?

A. Well, the ciénegas was some five or six acres that water flowed from; that was called the China Gardens even before I went there, because one time some Chinamen raised vegetables below it; and it was always a water producer, up to about 1899 or 1900, and then it began to give out; it might have been failing some before that, even.

Q. What became of that tract of land so far as its moisture is concerned?

A. Why it simply dried up; I think it is now all in cultivation; I know there is no ciénega there.

Q. Was that water used on the lands of the Cucamonga Vineyard Company, and the Cucamonga Land and Irrigation Company for any purposes other than irrigation, at the time your first acquaintance with it began in 1882?

A. Why, I presume that was simply used for -

Q. I thought you lived there in that neighborhood and knew about it.

A. It was all used for irrigation, except what was used for running the winery, and possibly domestic for a few people on the ranch.

Q. Was there any use made of it for domestic purposes?

A. Yes, sir.

Q. Were people living there?

A. Both by the original people, and also the people that lived at the brick hotel, and that lived near the winery; whatever people lived on the ranch; that is all; that is all that was used for domestic purposes; out of the Vineyard Company's half I mean.

Q. That is what I want to know, whether this particular water was employed for domestic uses, as well as for irrigation on those lands?

A. Yes, sir; it supplied domestic uses for people living on that ranch.

Q. And were Gallman and his associates carrying on the business of farming on those tracts of land?

A. Yes, sir; they raised some grain, if that is what you mean on the hills that were not too wet to raise grain on, that was not too much ciénega; and ofcourse they farmed a certain amount of alfalfa that they irrigated, and they used

it on the vineyard.

Q. Your language conveys the idea that you do not consider fruit growing farming,- that it is limited entirely to raising grain. I don't know whether that is your view of it strictly.

A. I have already stated that they used it on the four hundred acres of vineyard and irrigated the vineyard.

Q. There was some other farming was there not, fruit trees?

A. They had some fruit trees, orange and lemon trees, quite an orange orchard around the winery; and also an acre or two of walnut trees.

Q. Did they irrigate any grain or any corn?

A. They irrigated corn; I don't think they ever irrigated grain; I am not sure but I don't think so.

Q. Where could the corn grow?

A. It would grow north of the San Bernardino road and west of Vineyard Avenue.

MR. CHAPMAN, Q. Are you not connected with the Cucamonga Fruit Land Company now?

A. Why I guess I am; they are absolutely out of existence, as far as owning any property.

Q. Can you produce the book of minutes of the corporation, the Cucamonga Fruit Land Company, and have them here in Court?

A. I can go to A.M. Chaffey's office; I think Ephraim Lane is secretary, was elected last Spring,- has a meeting the first time in four or five years, and I can ask them of him; I don't know why they shouldn't come.

Q. Are you connected with the Cucamonga Land and Irrigation

Company

A. Not at all.

Q. Who has charge of those?

A. Willis Chiles is secretary of that corporation.

Q. I wish you would see if you can get them, because if you cannot we will have to take the depositions of those parties.

A. I think I can get the Fruit Land Company's books.

-o-

Here the Court, takes a recess until Tuesday, January 21st, 1908, at eleven o'clock A.M.

-o-

Defendant.

IN THE

Superior Court

OF THE

County of San Bernardino

State of California

Cucamonga Vineyard Company et al.,

Plaintiff

vs.

San Antonio Water Company,

Defendant...

Vol. XI

INDEX.

I. BENJAMIN, Official Reporter

Tuesday, January 21, 1908. Eleventh Day.

S. G. COUSINS.

S. G. COUSINS, heretofore sworn and examined, being recalled by Intervenors, testified as follows:

Direct Examination.

Mr. Haskell: Q. My understanding is that the evidence here-- it is an equity case-- and it is to be considered in for all parties for what it is worth. Mr. Cousins, you recollect being on the stand here at the former trial of this case in which you testified as to surface elevations of the ground at the Sixteenth Street wells, the Rubio well, and other wells north of the Red Hill?

A Yes, sir.

Q. Now I will ask you if you ran any lines of elevations from the lines which you heretofore testified to to a point where the waterfirst begins to rise in Cucamonga Springs.

A. Yes, sir.

Q. Did you find what the elevation of the water was at the Cucamonga Springs where it rises?

A. Yes, sir.

Q. You may give us that elevation and the date of taking it.

A. On April 10, 1906, the elevation of the surface water, as I call it,--

Q. Of the Cucamonga Springs?

A. Of the Cucamonga Springs, on the east side, or in the Cucamonga Creek as it has been shown on the map there, -- was 1332. feet above sea level.

Q. That is, on the east side of the Red Hill?

A Yes, sir.

Q. And the most northerly point where you found rising water?

A. Yes, sir.

Q. That water in its course south, it would get into the water system of the Cucamonga Water Company, wouldn't it?

A. Into the Old Settler's and Vineyard Company's water system.

Q. Now did you run a similar line of elevation connecting with the Sixteenth Street wells or any of those wells of which you have testified in regard to the elevation of, to well no.14 at the head of the Fady tunnel?

A Yes, sir.

Q. What did you find that elevation to be, stating the point of measurement?

A. At well no. 14 on April 10, 1906, I found the elevation of water to be 1293.94 feet.

Q. That is, thewaterin the bottom of thewell?

A. In the bottom of the shaft as it comes from the well.

Q. Do you know whether that is at the level of the tunnel or not at that date?

A. That is practically the tunnel level.

Q. How much lower would the water at that point be than the rising water in the Cucamonga Springs?

A. It would be 38.06 feet lower.

Cross Examination.

Mr. Chapman: Q. What time did you say you took that elevation at Cucamonga Springs?

A That was on April 10, 1906.

Q. Now doesn't the water appear on the surface of Cucamonga Springs at different points in different years and in

different seasons of the same year?

A. I presume it does somewhat.

Q. Did you take the elevations of Cucamonga Springs at the point they first appear at any other time in 1906? Later in the season than April 4?

A. No, sir; I ran the levels, of course, on April 10, but that was my date of observation of all the wells, and that too. But it was on a later date when I ran the level

Q. What date was it that you ran the level?

A I don't remember; it was in July some time.

Q. What was the object of running levels in July?

A. Because I couldn't do it all on the same day.

Q. You could do it in less than four months, couldn't you, or three months?

A. I presume I could, if I got at it.

The Court: Q. Was it in 1906 or '7 that you ran these levels?

A. 1906.

Mr. Chapman: And at that time, on April 10, the elevation at the point where the Cucamonga Springs appeared was 1542. feet? A

A. Yes, sir.

Q. What was the character of the season of 1905-6 for rainfall?

A. I think there was considerable rain if I remember right.

Q. Did you take the level at the point where the waters first appeared on the surface of the ground at Cucamonga Springs at any other time during that year? A. No, sir.

Q. Did you in 1905?

A No, sir.

Q. In 1907?

A Yes, sir.

Q. What time?

A. On May 10, 1907.

Q. That was another season of considerable rainfall, wasn't it?-- 1906-'7?

A. I think it was; yes, sir.

Q. What was the elevation on May 10, 1907?

A. 1338.9 feet.

Q. At the time you took the level of the Fourteenth Street well did I understand you to say that that elevation was the level of the water in the well?

A. Well No. 14?

Q. Yes, sir. On April 10, 1908, wasn't it?

A. Yes, sir.

Mr. Britt: Did you mean the Fourteenth Street well?

Q. No; Well No. 14. If I said Fourteenth Street I didn't mean it. It is thewell at the head of the Eady tunnel.

A. Yes, sir.

Q. And the elevation was 1293.94 at that time?

A. Yes, sir.

Q. Well, that elevation was to the surface of the water in the well?

A. Yes, sir; as it issued from the well. It is the surface of the water in the shaft.

Q. As it issued from the well?

A. Yes, sir.

Q. And that was how far from the surface of the ground?

A. It was 113 feet below the top of the ~~surface~~ curbing of the shaft.

Q. Did you take the same level of that well at any other time that season of 1906, or the elevation of it?

A. I observed it on December 23rd, 1906, that it was just in the same condition.

Q. And the elevation the same?

A. The elevation from the top of the curbing would be the same, and the elevation of the water would be the same.

Q. Had you ever taken the elevation of the water in the shaft or well before that time?

A. No, sir.

Q. Can you define or describe to us accurately at what point on the land it was that you took the level or elevation in Cucamonga Springs on April 10, 1906?

A. No, sir; I can't describe that accurately.

Q. Could you point out the exact spot on this map where the Cucamonga Springs appear on the surface of the land at that time?

A. No, sir.

Q. How long have you known the Cucamonga Springs?

A. About six years now.

Q. Have you ever been there at the time the waters of those springs first appared on the surface of the ground further south from the point where you took the elevation?

A. I don't understand your question.

Q. Well, you know that the direction of the flow of Cucamonga Creek is? A. Yes, sir.

Q. What is it? A In that vicinity it is in a general ~~way~~ southeasterly direction.

Q. At the time you took this elevation you say you took it at the point where the spring did then first appear on the surface of the ground?

A. Yes, sir.

Q. Were you ever at that place at a time when the waters of Cucamonga Creek first rose on the surface further south than the point at which you took this elevation?

A. I don't remember.

Q. Do you know about what the grade of the country at this place where the springs rose on the 10th of April, 1906, is?

A. No, sir; I have no figures on that.

Q. When you took these elevations didn't you discover about what the inclination of the land was and about what the grade per mile is?

A. No, sir; I had no occasion for that. Roughly speaking, I should say it was somewhere about five or six feet to a hundred feet. But that is roughly speaking.

Q. The Sixteenth Street wells, did you take the elevations of them?

A. Yes, sir.

Q. About what was the elevation?

A. I presume that is Wells nos. 1, 2, 3, 4 and 5?

Q. Yes, sir.

Mr. Britt: We object to that in cross examination. It may be proper evidence. I don't know that the information of the witness is on the subject.

Mr. Haskell: The witness has already testified as to the elevation of those wells on his former examination.

The Court: The objection is overruled.

Q. You say you did take the elevation?
A. Yes, sir.
Q.
Q. When?
A. I ran the levels of those wells in July.
Q. What year? A. 1906.
Q. What was the elevation of those wells at the time you made the observation?
A. On May 10, 1907-- I will have to correct my last answer.
Q. Well, correct it.
A. On the Rubio well, one of the Sixteenth Street wells, I took the level of that in July, 1906.
Q. The depth of the well?
A. I took the elevation of it. But the balance of the Sixteenth Street wells I took the levels and the elevation of the curbing on May 11, 1907.
Q. And what was the elevation?
A. The elevation of well no. 1 at the top of the curbing was 1492.43 feet.
Q. How was it with the Rubio well?
A. The elevation of the Rubio well at the top of the curbing was 1460.61 feet.
Q. Which is the most easterly of the Sixteenth Street wells?
A. The Rubio well, unless you consider the Haskell well a Sixteenth Street well.
Q. What did you say the elevation was?
A. 1460.61.
Q. Was that the surface of the ground?
A. No, sir; the top of the curbing. The top of the shaft curbing.

Q. Was that on the level of the ground or above it or below it?

A. Some instances it is nearly the same and some it isn't.

Q. Well, in the Rubio well, is that true, that in some instances it is and in some instances it is not, or does it remain at one fixed place?

A. At the Rubio well the top of the curbing is at the level of the ground as it was made there.

Q. Is that above or below the general level of the ground?

A. I think that is below.

Q. About how far below?

A. I couldn't say, because it is in the back of the hill-- a notch cut in the back of the hill.

Q. Could you approximate and tell us whether it is one foot or sixty?

A. I should say possibly it is ten feet below the brow of the hill or bench just beyond it.

Q. To the top of the curb?

A. Yes, sir.

Q. Have you taken the elevations of any of those points since the adjournment of the court last summer-- on May 24-- or the adjournment of this trial?

A. I don't think I did.

Mr. Britt: Q. The Haskell well is further east than the Rubio well, isn't it?

A. Yes, sir.

Q. When you speak of the elevations of the wells you in each instance mean the elevation of the curbing-- that is, the Sixteenth Street wells?

A. Yes, sir; the elevation of the top of the curbing. That is how I have specified it.

The Court: Q. What do you take as the basis of the elevations?

A. Up in the upper righthand corner of that map there is a station on Base Line marked there as "Gas pipe", and from one of Mr. Wright's maps I took that as so many feet above sea level. That is assumed as being correct as a bench mark.

MR. BRITT:

Q. Did you ascertain the distances between the various appearances of water in the Creek or what has been called the Cucamonga Springs here, and well No. 14?

A. The distance between them?

Q. Yes, sir.

A. No, sir.

The Court: Q. Can you give it approximately?

A. About a half a mile I should say.

Mr. Chapman: Q. Did you take the elevation of the Haskell well?

A. One of them.

Q. How many of them are there,-- of the Haskell wells?

A. Two that I know of.

Q. How far apart are they? A. Probably about 200 feet.

Q. And you say you took the elevation of one: Which was it?

A. The southernmost one.

Q. And what was the elevation?

A. The elevation at the top of the curbing was 1461.86 feet.

Q. Was the top of the curbing there above or below the surface of the ground?

A. I think it is just about the surface of the ground.

Q. When was that elevation taken?

A. I ran those levels about the same time that I did the rest, in July, 1906.

Mr. Haskell: We offer in evidence a deed of the Cucamonga Company, a corporation, with its principal place of business in the city and county of San Francisco, to E. T. Wright, J. C. Lynch and E. L. Wicks, dated the 5th day of January, 1886, recorded in the office of the County Recorder of San Bernardino county on the 18th day of January, 1886, at two P. M., in Book 44 of Deeds, at page 169.

The Court: What does it purport to convey?

Mr Haskell: That purports to convey to the grantee land water water rights ditches flumes and all other property in the Cucamonga Rancho and in and to all the property of every kind of party of the first part in the counties of Los Angeles and San Bernardino, State of California, including the property now held in trust for the stockholders of this company by John Lynch, John Archibald and P. Marsicano and M. Turner, said property being now assigned and transferred by the corporation of this company of the stockholders holding a majority of the stock of the company under and by virtue of an agreement entered into by all the stockholders of stock individually for the control sale conveyance of said interests by a majority in interest in said properties, and said stock, provided however the west 6,200 acres more or less of said land are contracted to be sold to George and William Chaffey by parties of the first part and said part of said land is hereby sold and conveyed subject to said contract on which a balance of $35,400 is still due and

unpaid, which contract with all moneys due and to grow due thereunder and all rights thereunder are hereby sold and transferred to said parties of the second part, namely, to said F. T. Wright, J. C. Lynch and M. L. Wicks Provided however the amounts due to this company on contracts for the sale of lands and rate by the settlers or others for lands east of the vineyard known as the Cucamonga Vineyard and all the amounts heretofore collected and all cash on hand from whatever source derived are hereby excepted from this sale and reserved to the stockholders and the party of the first part.

The Court: That was from the Cucamonga Company?

Mr. Haskell: Yes; from the Cucamonga Company to Wright, Lynch and Wicks.

The Court: Do you understand that that purports to be all the property remaining in the Cucamonga Company at that time?

Mr. Haskell: At that time.

Here the Court takes a recess until two o'clock.

AFTERNOON SESSION:-

Mr. Haskell. Before the noon recess we offered in evidence a deed from the Cucamonga Company a corporation to F. T. Wright, J. C. Lynch and M. L. Wicks. Will you consider that as read?

The Court: If I remember right, at the former session it was stipulated that all these exhibits might be deemed read, and simply to read such portions we might desire.

Mr. Britt: There is another matter that ought to be mentioned and understood explicitly, and that is relative to the testimony introduced on behalf of Intervenors and on behalf of plaintiffs respectively. We are making virtually a common

cause here, and our understanding is or, at least, we desire to have it understood that the testimony introduced on behalf of Intervenor shall be deemed as introduced on behalf of plaintiffs unless it is otherwise expressed, and that the testimony introduced on behalf of plaintiffs is to be deemed introduced on behalf of Intervenors unless otherwise signified.

The Court: In other words, the evidence is deemed to be applicable to all the issues unless otherwise specified.

Mr. Britt: Yes, sir.

Mr. Haskell: We agree to that.

Mr. Chapman: I don't understand how any part of it can be considered in and not in.

Mr. Britt: An occasion might arise where the intervenor is making common cause against both plaintiff and defendant, in which the parties would be very much embarrassed to know that the testimony coming in for the intervenor or an adversary is to be regarded as his or its testimony. But that is purely an academic question.

Mr. Chapman: If the intervenor's testimony is not part of the case against defendant the intervenor ought not to introduce it. Suppose on the conclusion of the evidence here on behalf of plaintiff and the intervenor we should desire to take some action with reference to disposing of this case there. It would hardly be expected that we could go through these volumes of testimony to see when counsel say "that is not my evidence" and when they say "that is my evidence." If the evidence is in here on the case made against the defendant we imagine that it is in here for all the purposes

that it can affect.

The Court: I believe the stipulation is broad enough to obviate that difficulty.

Mr. Britt: There are one or two instances where we have expressed a dissent to some part of the evidence introduced by intervenors, and not more than two occasions. We have specified that some particular matters of evidence introduced by intervenor referred to themselves and that we did not care to admit established or to have considered as established on the part of plaintiffs. But it was of not much consequence when it came in and there is very little of it.

Mr. Gregg: And I suppose farther that this evidence that is in is deemed in only so far as it is relevant to the issues made by the respective parties.

The Court: When it comes to the defendant putting in its case they might introduce evidence material and relevant to plaintiffs' case and not to Intervenors'.

Mr. Gregg: The issues are somewhat different and the evidence would only be considered as far as it is relevant to the issues made by the respective parties.

Mr. Chapman: That would follow as a matter of course. We can understand how some evidence introduced by plaintiff or intervenor might not have any effect on the other because the other might not be related to that fact. But in so far as the evidence upon the character of this country is concerned, and the boring of these wells and the sinking of the tunnels and the drying up of Cucamonga Springs, I supposed they were all coming in as part of the record on behalf of both of them.

Mr. Gregg: But there is no issue as to the tunnel by one of them.

The Court: Technically speaking, the proper method would be for plaintiff to put in his case and then the intervenor his case. But I suppose as a matter of convenience they are putting it in in this manner. It seems to me under the statements made by counsel there cannot be any embarrassment about it.

Mr. Haskell: We desire to offer in evidence a deed to the east half of the east half of the northeast quarter of section 11, township 1 south, range 7 west, S. B. M., containing 40 acres, together with four inches of water flowing from the Cucamonga Springs, under a four-inch pressure, to be delivered in iron pipes at the northeast corner of said section 11. The deed is from M. L. Wicks, M. T. Hodgkins, E. T. Wright and J. C. Lynch to George D. Havens. We offer it as recorded in the office of the county recorder of San Bernardino county, in Book 44 of Deeds, page 156. The deed is dated January 22, 1886, and recorded on January 25, 1886, at 10;30 A. M. Now, Mr. Chapman, this deed covers four inches of a water right . As to whether or not that 40 acres of land described in this deed is part of the Rancho Cucamonga I don't know.

Mr. Chapman: You have given the description, haven't you? The east half of section 11?

Mr. Haskell: The east half of the east half--

The Court: I don't remember anything that you have offered so far deraigning title from M. T. Hodgkins.

Mr. Haskell: The deed I offered before dinner was showing

that the title was in Wicks, Wright and Lynch. Hodgkins is simply a superfluous party joining in the deed.

We have set out in our complaint that we are the owners of the east half of the east half of the northeast quarter of section 11, township 1 south, range 7 west, S. B. M.

Mr. Chapman: And your allegation is the east half of the northeast quarter?

Mr. Haskell: Mr. Haven owns three or four hundred acres, but we have only alleged that he owns 80.

Mr. Chapman: That is, the east half of the east half of the northeast quarter?

Mr. Haskell: Yes; will you stipulate that he is the owner without going into the title? The 40 in this deed is the 40 which we describe in the complaint.

Mr. Chapman: How do you describe that in the deed again? The east half of what?

Mr. Haskell: In the deed itself?

Mr. Chapman: Yes.

Mr. Haskell: The east half of the east half of the northeast quarter.

Mr. Chapman: That wouldn't be 80 acres.

Mr. Haskell: No; it would be 40. As a matter of fact he owns three or four hundred acres there, or more. We introduce the deed to show from whence we get water. We get a part of this land from a different source.

Mr. Joliffe: Have you got any water with the other deeds?

Mr. Haskell: Not with this 80 that we are putting in evidence.

Mr. Chapman: Does the abstract show the title ?

Mr. Haskell: I think it does.

Mr. Chapman: Suppose you let us have it and we will see.

Mr. Haskell: If you are going to look that over, I had better reserve the rest of it.

Mr. Haskell: We now offer in evidence a deed purporting to convey the east one-half of the southeast quarter of the southwest quarter of section 2, in township 1 south, range 7 west, San Bernardino Base and Meridian, together with such a proportion of the water belonging to the grantors arising from the springs on the Cucamonga Rancho as the land hereby conveyed bears to all the land now or formerly belonging to said grantor which can be reasonable be irrigated for semi-tropical cultue from said water. The deed which we offer is a grant from the Cucamonga Company, a corporation, to S. Musselman, dated the 20th day of November, 1882, and recorded in the office of the County Recorder on the 12th day of December, 1882, in Book 31 of Deeds, page 461.

Mr. Haskell: Also, a deed purporting to convey the same property, executed by S. Musselman, grantor, to F. A. Holxheier, dated the 12th day of December, 1882, and recorded the 12th day of December, 1882, in the office of the County Recorder of San Bernardino County, in Book 31 of Deeds, page 463.

Mr. Haskell: Also, a deed purporting to convey the same property, executed by the following grantors: F. A. Holzheier, S. Musselman and Mrs. F. Musselman, wife of said S. Mus-

selman, to George D. Haven, grantee, dated the 7th day of January, 1886, recorded in the office of the County Recorder of San Bernardino County, the 12th day of January, 1886, in Book 45 of Deeds, at page 6.

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GEORGE D. HAVEN.

GEORGE D. HAVEN, a witness produced by Intervenors, being first duly sworn, testified as follows:

Direct Examination.

Mr. Haskell: Q. You are George D. Haven, one of the intervenors in this case, are you not?

A. Yes, sir.

Q. You heard me just offer in evidence a grant deed to you, executed by Musselman and others, did you not?

A. Yes, sir.

Q. How many acres are there in that piece of property?

A. 20 acres.

Q. How long has that grant been under cultivation?

A. I can't say. It was under cultivation when I bought it.

Q. How many years ago? A. That was, as near as I can remember, in 1886 when I bought it.

Q. And it has been under cultivation ever since?

A. Yes, sir.

Q. Planted to what kind of trees and vines?

A. Well, it had some orange trees and small fruit trees, and mostly grapes.

Q. Have you made any use of the water?

A. We used it for irrigation right along up to the time that they shut it off.

Q. How long ago was it shut off from you?

A. I think it was in July, '85.

Q. You don't mean '85?

A. I mean '95.

Q. Ten years ago?

A. '86 was when I bought it-- About five years ago, I mean.

Q. Is that a character of ground that needs water for irrigation?

A. Yes, sir.

Q. And is benefitted by it?

A. Yes, sir.

Q. When that water was being delivered to you in regular turn how was it delivered?

A. When I bought the ground it was delivered in an open ditch. Afterwards, when the company came in there and piped the land, it was delivered to the highest point of the land.

Q. How often did you get the water for irrigation?

A. Twice a month.

Q. In how large a head?

A. We got two inches of water-- that is, we got the equivalent of two inches of water for every day for six months-- I mean every 30 days; and then we divided that and got two heads a month. Every fifteen days we got a head of water.

Q. How large a head?

A. Well, it was 30 inches, or supposed to be.

Q. Measured under a four-inch pressure?

A. They never measured it. They turned out what was supposed to be that much water.

Q. 30 inches continuous run for 24 hours twice a month?

A. Yes, sir.

Q. And that continued up to five years ago?

A. That continued up to about five years ago .

Q. And since then?

A. We haven't had any water there.

Q. Now this other water right that you spoke of that is mentioned in the deed which I read, comes from what source?

A. That comes from the pipe.

Q. From the Cucamonga Springs?

A. Yes, sir.

Q. And did the water from the Musselman place come from the Cucamonga Springs also?

A. Yes, sir.

Q. How long have you been the owner and user of this four inches of water?

A. I think it was in '86 that I bought it from the company. It was the first water right they sold.

Q. And you have been using that ever since?

A. Yes, sir.

Q. What uses have you made of that water?

A. Well, I used it for irrigating around the different places on the ranch and for domestic purposes.

Q. Have you a winery on your place? A. Yes, sir.

Q. What use have you made of it there?

A. I bought it principally for use in the winery and for domestic purposes.

Q. How is it delivered to you?

A. Delivered at the corner of the 40 acres that I bought with the water. That is, on the northeast corner of section 11.

Q. In a continuous flow?

A. Yes, sir; night and day.

Q. And you have had the use of the water continuously for these purposes?

A. Yes, sir.

Q. Has there been any shortage in this water?

A. Well, since about a year ago they put in a meter and they reduced the pipe down from two inches to one inch, and since they put the meter in I can't get the amount of water that I am entitled to.

Cross Examination.

Mr. Chapman: Q. What company was it that laid the pipes to this 20 acre tract that you speak of from which you get the water for the 20 acre tract?

A. This company that bought out the San Francisco Company--that is, Wright Co.

Q. Was it a corporation?

A. I don't know whether they were incorporated when they laid that pipe or not. I supposed they were.

Q. To whom do you refer as the company?

A. This company that you mentioned the names of them. I can't call them.

Q. Lynch and Wright and--

A. Yes; and--

The Court: Wicks?

A. Yes, sir; Wicks and Wright and--

Q. Hodgkins?

A. Yes, sir.

Q. What did Hodgkins have to do with it?

A. He bought in with them after they purchased the land. These

other parties purchased the water right and land from the San Francisco Company and then Hodgkins came in after that, before I bought the water from them.

Mr. Chapman: Q. What pipe is it that you refer to from which you got the water?

A. The piping from the Cucamonga Springs. They laid the pipe all over that land after they organized the company.

Q. And where did the pipe extend to and in what direction?

A. The pipe that came to my corner-- You mean the two inches of water?

Q. Yes.

A. That is separate from the other. It is a mile. I suppose that came down into what they call Turner Avenue.

Q. The hydrant is right at the corner?. And in this pipe that takes water from the Cucamonga Springs?

A. Yes, sir.

Q. You say the two tracts are separated by about a mile?

A. The two water rights; yes, sir. They extended the water out beyond there to the corner of the 40 that I bought for the two inches of water, and delivered that water to the northeast corner of the 40 acres of section 11.

Q. Since the water was shut off by the company where have you got water for it?

A. We haven't had any water for it.since I owned it. I transferred it to another party-- I think they have had it two seasons and they have bought some outside water. That is, they bought water that belonged to other people.

Q You don't own it now ?

A. No; I don't own it now. I am a little hard of hearing.

You will have to excuse me.

Q. You still own the 40-acre tract in section 11?

A. Yes, sir.

Q. Is that the tract on which you have the winery?

A. Yes, sir; well, not on that tract. It is on that ranch. The winery is on section 12 in the home place where I originally ran the water to when I first bought it.

Q. Do you own that place any longer?

A. Yes, sir.

Q. Do you know how much water you used on that place about that winery?

A. No; I never kept any account of it. I used all that was necessary.

Q. Have you any idea how much that was?

A. Well, it was all that they would give me of the four inches, without measurement. I had a continuous flow and some times I used to save up the water to get enough to carry me through.

Q. How did you save it up?

A. I saved it up in tanks in the winery.

Q. What size tanks?

A. I had different size tanks. I had tanks that ran from 250 gallons up to 4000.

Q. How many of them did you have?

A. Let me see. Of the large tanks-- I had about 20 tanks.

Q. Altogether?

A. Yes, sir.

Q. Do you know about the total storage capacity?

A. No; sometimes some of the tanks would be full of wine,

and sometimes to save up water during the night I would run water into them tanks to save it up and have plenty of water in the morning. Supposed to be delivering four inches.

Q. Have you any idea how much you had stored in those tanks all put together at one time?

A. No; I never undertook to keep any track of it.

Q. You had plenty of water?

A. I had plenty of water then. Yes.

Q. You are still engaged in the same business?

A. Yes, sir; I am not making wine now.

Q. What use are you making of the water?

A. I use it for irrigating around the house and the gardens and my trees, wherever I can get the water to it.

Q. How long since you quit making wine?

A. I guess it is ten years.

Q. Do you know how much wine you have made annually-- how much wine did you bottle annually when you were running the winery?

A. I didn't bottle it. I sold it by the gallon or carload lots, whichever way I could sell it. I had as high as 55000 or 56,000 gallons that I would make therein one year. That is all the storage I had.

Mr. Britt: Q. How many acres of vines did you have when you were making 55 or 60,000 gallons?

A. I had a good many more acres of vines than I could make up into wine. I had 260 acres in one place and 40 acres in another.

Mr. Haskell: Q. How many acres have you got now?

A. I have 440 acres under cultivation now into vines.

Mr. BRITT: Q. What do you do with your grapes at present?

A. I am selling them now to thewineries..

Mr. Chapman: Q. You say you have about 400 acres now in vineyard?

A. 450 acres now.

Q. Do you cultivate that without water?

A. Out there, yes; I can cultivate them without water.

Mr. Haskell: Q. Is there any difference between the character of the soil and the necessity for water for raising vines where you grow them and the red lands over east and north?

A. Oh, yes; a great deal . One mile makes all the difference in the world.

Q. Which requires the most water?

A. The red lands.

Q. Will the red lands produce grapes without irrigation successfully?

A. I couldn't make a success ~~without irrigation~~.after they shut off the water from the twenty acre piece. We have fifteen acres of vines and they cut down the yields to almost nothing. And the vines came very near dying.

Q. How does your 20-acre piece compare in quality of soil to the lands of the Cucamonga Vineyard Company?

A. I should judge from that 20 acres, or probably a little lower down, is those red lands that requires water.

Q. The same kind of soil?

A. Yes, sir.

Mr. Chapman: Q. Are you including the Cucamonga Vineyard Company's lands as among the red lands?

A. Yes, sir.

Q. Don't they cultivate those lands without water now?

A. You mean the old Cucamonga vineyard?

Q. Yes.

A. I don't know what they are doing. I think they are raising grapes there.

Q. And without water?

A. I suppose so; I don't know. I heard that the water was shut off; but they are not getting near the quantity of crop that they used to.

Q. How do you know that?

A. They tell me so.

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E. T. WRIGHT.

E. T. WRIGHT, heretofore sworn and examined, being recalled for plaintiffs, testified as follows:

Mr. Britt: Q. Referring to the paper which you have now in your hands and which bears at the head this inscription: Tabulation of Measurement of Cienegas and Developments at Red Hills, as indicated in Miners' inches,-- I will ask you first what is meant by the term "miners inches"?

A. It is intended to mean what will flow out of an inch aperture under a four-inch pressure/

Q. If it is reduced to fractions of a cubic foot what does it mean?

A. We practically use it as 50 miners inches making one cubic foot per second.

Q. A flow of water equal to that?

A. Yes, sir.

Q. What does this paper contain?

A. It contains, first, the date of the measurement, next the name of the observer or observers who took the measurements; and then there are three columns that represent the flow of water from the east side, and a fouth column, totals on the east side.

Q. East side of w at?

A. East side of the red hills, including the "Y" Tunnel and the Creek flow of water, and any cienegas also on that side. All the other columns include the water flowing on the west side, divided into different headings as to where they are located.

Q. I notice in the column containing the names of observers that of E. T. Wright. That is named frequently. You are the same person?

A. Yes, sir.

Q. By whom was this prepared?

A. It was prepared by me.

Q. And contains the result of your own observations and also--

A. My own observations and the additions of other ~~xxxxxxxx~~ observations of some other people.

Q. In the third column from the left, under the title "Creek Division Box, 30-inch line," appear numerous figures and entries indicative, as I understand you, of inches of flow of water. Where was this Creek Division Box, 30-inch Line, located? What is the meaning of that heading of that column?

A. It is the same place testified in this case as Weir No. 8, and is measured at the same box, and is the water coming through the 30-inch pipe line.

Q. What part of the water of theCucamonga Springs was measured at that Creek Division Box?

A. It was all the Cucamonga Springs coming down the Creek.--Cucamonga Creek-- on the east side of the Red Hill.

Q. And those measurements then in the first column of figures of this tabulation show measurements of what water?

A. Of the water known as the Creek Water, and measured at Weir No. 8.

Q. Then the measurements of what water are included in the next column, being the second column of figures in this tabulation?

A. That is all the waters coming from the "Y" Tunnel and the cienega immediately below the "Y" Tunnel.

Q. And under what designation, or how is that place described?

A. It is described here as "Division Box of 16-inch Line and "Y" Tunnel, built in 1906 and '7." That is the date of the building of the "Y" Tunnel.

Q. The water, then, which was measured at that point, and the results of the measurements tabulated in that column, was water artificially collected?

A. Not altogether, because the cienegas flowed water before the"Y" Tunnel was started at all.

Q. The next column is headed "China Cienega." That is the third column of figures. What does that indicate?

A. That is from the cienega known and referred to in the testimony as "China Cienegas" on the east side of the Red Hill.

Q. And the fourth column of figures is headed "Total" and contains the totals of what columns?

A. Of thethree other columns for that same date

Q. Those columns all refer to measurements and total of measurements on the east side of the Red Hill?

A. Yes, sir.

Q. Now the second division of this tabulation seems to be divided de vot d to the west side. That means the west side of the Red Hill?

A. Yes, sir.

Q. And the first column is headed "Spring Northwest of Tunnel No. 2 Portal." Where was that portal mentioned there, and that spring? Can you locate it on Exhibit 1?

A. I can point to the place, because the portal of Tunnel No. 2 is at the mouth of the Tunnel No. 2. You see the water practically ran out. At that time there was quite a stream of water in the creek bed on thewest side of the Red Hill.

Mr. Chapman: Which time are you referring to?

A. I am referring back to '85 and '90.

Mr. Britt: Q. You had your pencil there on the particular spot. Can you describe it so that it can be identified from the record and the map?

A. Practically where it says "Granite Monument, Elevation 1277" on the southwest corner of section 4, township 1 south, range 7 west, S. B. M.

Q. Then under the general caption "West Side" the second column appears to be "West Cienega D." Where is that situated?

A. That is a cienega as shown on plaintiffs' Exhibit 1, and mostly located at the northeasterly part of the 90-acre tract.

Q. Has the 90-acre tract been described on this map? It

is an L shaped rectangular figure appearing on this map, Exhibit 1," in the eastern part of what is indicated as section 5.

TheCourt: As I remember it, there was a very good map of that 90-acre tract used in the McPherson case which shows all those things very well.

Mr. Stevens: You have a number of corners: Why not describe it?

A. There are no courses and distances. There is a corner monument and the elevation of each monument.

Mr. Britt: I don't think there will be any difficulty if it is described as the L shaped rectangular figure in the western part of section 4.

A. That wouldn't quite do, because here is an L shaped rectangular figure on the west side of section 4 that belongs to the San Antonio people.

Mr. Chapman: Wouldn't it be sufficient to say that it is the L shaped tract through which the line marked "Tunnel" runs northerly?

A. That would identify it, because there is only one of that, where the portal of tunnel No. 2 is, near the southeast corner.

Mr. Britt: I suggest that the witness take a pen and mark it "90-Acre Tract.)" (Witness marks tract "90-Acre Tract.")

Q. The West Cienega D is marked in that tract?

A. It is the cienega showing on the 90-acre tract at the northeasterly corner.

Q. Corner, or part?

A. The northeasterly part.

Q. Now the third column is headed "Picnic Springs", and it looks like "Cienega C."

A. Yes; it is C.

Q. Where is that cienega-- that spring-- situated?

A. That was the water rising practically at the northwest corner of the 90-acre tract where it shows "Granite Monument" on Plaintiffs' Exhibit L.

Mr. Chapman: What is it that indicates that?

A. "Granite Monument."

Q. I mean on this paper?

Mr. Britt: It is the third column.

A. "Picnic Springs, Cienega C."

Q. The fourth column under the caption "West Side" is headed "Artesian Wells, Nos. 1 and 2": Where are they situated?

A. They are the two artesian wells at the north and northeasterly side of the 90-acre tract, marked "Well 1" and "Well 2".

Q. Then the next is the "Tiburcio Springs." Where is this spring and where was it situated?

A. That was a small amount of water on the edge of the 90-acre tract between the two granite monuments marked "Elevation, 1303" and the other "Elevation, 1312." on Plaintiffs' Exhibit 1.

Q. The next column under that caption of "West Side" is "Tunnel No. 2 on 90-acre Tract."

A. That is the Tunnel No. 2 known in this suit.

Q. Is that the same as the Eady Tunnel?

A. Yes, sir; the same tunnel.

Q. The next column is headed "Weir No. 1" and the heading

"Weir No. 1" is followed by the further inscription "Cucamonga Water Company from Mouth of Tunnel No. 2."

A. That is the weir that turned the water to the Cucamonga Water Company at the mouth ofTunnel No. 2.

Q. The next column is "Weir No. 2" with the entry following "San Antonio Water Company from Mouth of Tunnel No. 2."

What does that indicate?

A. That indicates the amount of water flowing over the weir at the mouth of Tunnel No. 2 that flows to the San Antonio Water Company.

Q. Two weirs from that tunnel?

A. Yes, sir.

Mr. Chapman: Q. And they measure the sum total coming through the tunnel?

A. Yes, sir.

Mr. Britt: Q. And the next column, "Total", contains the summary of what?

A. The summary of all the water as designated here as measured on the west side.

Q. And the last column of the tabulation to the right, under the head "Rainfall previous season" indicates what?

A. The amount of rainfall by the San Bernardino measurement the season previous to the dates of measurement, in inches.

Q. The first entry in the tabulation purports to be the observation of William Fitzhugh, made in September, 1905, when there was flowing at the Creek Division Box 225.36 inches, and from the cienega 51.75 inches, making a total of 277.11. Where did you obtain the figures appearing there?

A. From the testimony of Mr. Lynch appearing in this case.

Q. In this case?

A. Yes, sir; I heard him testify to those facts.

A. The next entries appear to have been made, or purport to represent, measurements made by Culver: Where did you obtain those figures?

A. From the same source; in this case. Mr. Lynch's testimony on the stand here.

Q. The measurements here represented by Eaton, I think you have not verified, or do you know anything about them?

A. I have verified this measurement here, with his original measurement turned in to me as one of the Cucamonga Water Company board a few years ago. But it has not been testified to in this case.

Q. Coming down the column to July 13, 1889, it seems that E. T. Wright made some observations. The figures show there, for instance, what amount of water flowing in the creek at that time?

A. 184.58 miners' inches.

Q. And from the "Y" Tunnel?

A. "Y" Tunnel and cienega below, 163.57 inches.

Q. And the China Cienega?

A. 13.27.

Q. Making a total of water flowing on the east side at that time of how much?

A. 361.42 inches.

Q. Those are your own observations?

A. Yes, sir.

Q. Did you make the observations recorded and entered here on the west side at the same time?

A. Yes, sir.

Q. For the purposes of explanation here, go on and say what the several figures indicate.

A. In the northwest of portal of Tunnel No. 2 there was 3.94 inches at that time.

Q. That was a spring there?

A. That was a spring and the creek originally, and the first measurement made was 56 inches, and it had flowing 3.94 inches after the tunnel was run two or three years. It only flowed 3.94. The next was Cienega D, 40.53 inches; Cienega C, 17.33; artesian wells no. 1 and 2, 15.14; Tiburcio Springs was 1.81; and flowing at the mouth of Tunnel No. 2 at that date 54.02 inches. And out of the China Garden Cienegas at that date there was 16.76 inches. Making a total on the west side of 149.53 inches.

Q. The next measurement was July 14, 1890, and made by yourself?

A. Yes, sir.

Q. The Culver measurement of July 14, 1890?

A. It was made at the same date and the same time. He made his measurements distinct and I made mine, and this is a copy of what he turned over to our company.

Q. Were you with him at the time?

A. I was with him all the time. But that was his method of measurement and his calculations, and they varied a trifle from mine.

Q. The following measurement is June 29, 1893.

A. I see there is only one measurement made that day, and that was of Cienega C on West Side. That was 13.29 inches.

Q. On July 14, 1893, you made another measurement on the

west side.

A. I made a measurement of all the water flowing at the mouth of the Tunnel No. 2, 36.45 inches.

Q. On September 15, 1894, and June 12, 1895.

A. I made the entire measurements on the east side on those two dates.

Q. And the results shown here show a total of 356.29 inches on September 15, 1894, and 374.40 inches on June 12, 1895?

A. Yes, sir.

Q. Now the measurements next following purport to have been made by F. E. Trask. In August, 1896, August 10, 1897, August 13, 1898, are taken from his testimony on the stand here in May last.

A.

Q. The measurement next following purports to have been made by yourself, a single measurement.

A. Yes, sir; a single measurement of Cienega D, 30.75 inches.

Q. The next measurement purports to have been made by N. W. Stowell. Do you know anything abot that personally? April 1st, 1899?

A. I don't think I know anything personally about it.

Q. And the next, June 15, 1899, by E. T Wright: Do you know anything about that personally?

A. It was evidently the only one measurement of Cienega D, 13.46 inches.

Q. August 21, 1899, another measurement by E. T. Wright.

A. I measured at that time the flow from the creek at what is called Weir 8, as 91.58 inches, which included a small amount of water that we carried down a little pipe from the

former China Cienega of the East Side.

Q. Can you tell how much there was of that?

A. Somewhere from 5 to 8 inches of water; and also the water from the "Y" Tunnel Cienega 80.95 inches, making a total on the east side of 172.53 inches; and also Cienega D at that time, 3.13 inches; and artesian wells nos. 1 and 2, as 2.68 inches.

Q. The next measurement, or rather, a measurement made in April of that year, somewhat previous to the one you have been describing, by Newman and Finkle: Do you know anything about that personally?

A. Was I with them, do you mean?

Q. Do you know anything about it personally at all?

A. I only know where I got this data, if that is what you ask for. I was not with them personally..

Q. Where did you get it? A. I got it from what was introduced in evidence in the McPherson case.

Q. I will not ask you to verify the measurements. The following measurement, February 11, apostrophe, 2 ciphers,-- I suppose that means February 11, 1900?

A. Yes, sir.

Q. Then March 2, 1900, you seem to have measured all the water on the east side?

A. Yes, sir.

Q. 87 inches in the creek?

A. 82 inches in the creek; 73.26 in the "Y" Tunnel and the cienegax below it.

Mr. Chapman: Q. What date was that?

A. March 2, 1900. Making a total on the east side of 155.26 inches.

Q. The other entries following your name as observer, they were made by yourself, and with the results shown in the tabulation?

A. Yes, sir; they were.

Q. The next measurement made by E.T. Wright, was April 18, 1900?

A. Yes, sir.

Q. And thence following on down to December, a number of measurements made in 1900 down to December, all by E.T. Wright, correctly set forth here are they?

A. Yes, sir.

Q. Then follow some entries made by Wright and Hobbs, commencing January 2nd, 1901, and the last February 11th, 1901.- No, January 20th, 1901: Were those made by you in conjunction with Hobbs?

A. January 2nd with Hobbs, and January 6th with W.L. Cooke, and January 20th with Hobbs.

Q. February 11th, 1901, E.T. Wright, measurement of water flowing from the Y tunnel, and the cienega below it -

A. The cienega below it.

Q. Amounting to -

A. 86.24 inches.

Q. And the measurements made by Wright and Stowell on February first, 1901: Did you make those personally?

A. I made those personally; as Mr. Stowell was with me he may have made his own measurement; I can't remember; I made them personally if I have got them down here.

Q. The figures given in the several columns represent correctly the result of those measurements?

A. Yes, sir.

Q. Following measurements, May 11th and July 23rd 1901, seem to have been made by yourself?

A. Yes, sir.

Q. Correctly set forth here?

A. Yes, sir.

Q. The measurement of July 24th, 1901, purports to be made by H.W. Stowell?

A. There are no measurements following on that line; I suppose I intended to have him fill it in, but it has not been done.

Q. Commencing July 30th, 1901, there seems to be some further measurements by E.T. Wright: The results stated here are those obtained by yourself?

A. Yes, sir.

Q. The other measurements which purport to be here entered when E.T. Wright was observer, state whether or not they are correctly made?

A. They were; and set forth as measured.

Q. Going back to the top of the column of measurements on the east side, I notice that when Fitzhugh made his measurement, September, 1885, there appears to have been 225.56 inches of water in the creek; the next year 201.40, Culver's measurement; while we come to your own measurement, July 11th, 1899, E.T. Wright, 164.0 in the creek, and 100.57 as flowing from the 1 tunnel and the ciencga below; the water in the creek seems to have fallen off from some of those measurements above, for example that of Culver: Do you know whether there had been any construction, any

artificial cuts made in the cienegas or in the springs there in the neighborhood, between the first measurements in 1888, and the time of your measurement in 1899?

A. The only thing of any consequence that I know of was the building of the Y tunnel, which was completed by '89 or the year revious, and was commenced in 1886; that is completed as far as it was finished for some years following; there has been some work done since that date.

Q. Well, that subsequent work was done in what year?

A. In the year 1900 and probably in 1901.

Q. That is on the Y tunnel?

A. Yes, sir.

Q. Was that work done under your own supervision, or with your own participation?

A. Yes, sir.

Q. What did you observe with reference to the effect on the flow of water from the Y tunnel, of the work done in 1900 and 1901?

A. Why, it increased the quantity of water flowing from 42 and something inches, at the mouth of the tunnel- it was then measured in April, 1900,- to something over 80 inches, some six months following; but that included the boring of the two wells at the end of the branches of the Y,- whatever water we got by doing that.

Q. What are those two wells called in the evidence here, or on this Exhibit 1?

A. Well, the well at the end of the west branch of the Y tunnel is called Bellman Well No. 2, in the ~~xxxx~~ evidence in this case. The other well has not been mentioned in this

case that I know of. It is a well bored at the end of the east branch.

Q. You say there was a temporary increase of water as a result?

A. It increased straight along all that summer; we lowered the end of the Y nearly ten feet lower than it had been before; also bored about two wells; it was a contract let by the Sacramento Water Company, and the Sacramento Land and Irrigation Company to W. W. Stowell I think to do the work.

MR. CHAPMAN, Q. Are you testifying from memory or the sheet you hold in your hand?

A. From memory entirely.

MR. SMITH, Q. How long did these tunnels continue to discharge water, after the deepening which you have mentioned?

A. I can refer to the measurements made on this sheet better than any other way: All through 1901 they continued discharging a good quantity of water until the latter end - I see by September, 1901, it had fallen to about 32 inches, and these are the last measurements that I have on this sheet of any water flowing there.

Q. You made measurements of the water flowing on the Y tunnel I suppose sometime after that, or made observations if not measurements?

A. On the Y tunnel?

Q. Yes, sir.

A. Why, I observed when it was perfectly dry.

Q. When did you observe that the Y tunnel had ceased to slow water at all?

A. It might have been in 1903, but I think it was in 1904; I

wasn't out there in 1902 and 1903 at all that I remember of; I was not I feel very sure, unless some reference is made on this map.

Q. I notice on February 20th, 1904, according to this tabulation that you made a measurement in the stream at weir No. 1, and found 11.9 inches of water?

A. Yes, sir.

Q. February 20th, 1904: Do you remember whether there was anything at that time flowing from the Y tunnel or the ciénegas?

A. There was not.

Q. State whether or not there was anything then left at all of the Cucamonga Springs on the east side, other than that 11.9 inches?

A. At that date there was not.

Q. Well, that season you seem to have made a series of measurements along through 1904, at the same place?

A. That was about the time I think I was employed on this suit and was making measurements for this case

Q. It ran down to a matter of three inches of such a matter in October?

A. The lowest measurement was 2.49 inches, as Mr. Reed testified to, in January, 1901.

MR. BRITT: We will offer this tabulation in evidence to the extent that it contains the result of measurements which have been testified to in the course of this trial, and to the extent that in addition to those it contains the results of measurements testified to by Mr. Wright at the present time. There are a few measurements there, like the second

measurement of Culver and Locke, and that of Eaton, and one of Mr. Finkle I think, and perhaps a few others, which we do not offer, but hope to supply them before the trial is concluded. We will ask that it be marked the proper exhibit (Admitted and Marked "Plaintiffs' Exhibit 52)

Q. What do you know about the flow of water into what is called the tunnel No. 2, the Padie Tunnel, whether after the tunnel was first opened, the water increased or diminished whether the tunnel was afterwards opened, and if so at what time, and whether the flow of water from that tunnel was strengthened, or increased by the boring of any wells?

A. Will I go on and state the history of the tunnel?

Q. Yes, sir?

A. Why, the tunnel, we commenced it in January - I say we - I mean the Cucamonga Fruit Land Company,- commenced to build that tunnel in January, 1888, and I think worked nearly continuously on it, possibly for two years, with breakdowns and so on, and ofcourse there was no water running out of the tunnel to start with, befcause it was started in dry land on the side of the hill, but we increased the flow so that two years later there was between 73 and 74 miners' inches flowing from the tunnel.

Q. That would be in 1890?

A. Yes, sir; during the construction of that tunnel I think there was two wells bored, small ten inch wells, if I remember right; but neither well produced more than one or two or three miners' inches; just a small flow; and we were very much disappointed in them; and they were shallow wells, perhaps 200 or 250 feet from the surface; then work ceased

on the tunnel, and there was nothing done practically for six years, until the water began to get scarce, and the flow of the tunnel had decreased, so there was only about 18 miners' inches flowing from the tunnel.

Q. Do you mean about 1896?

A. That was in 1896; and it was in 1896 that The Fruit Land Company let a contract to Mr. N.W. Stowell, to improve the tunnel, put in cement pipe, bore wells as he saw fit at the northwesterly portion of the tunnel, and to reconstruct the work, and he commenced that year; and I don't know that I could tell without looking it up how many wells he bored; he bored four to five wells near the end of the tunnel, and laid cement pipe in the tunnel.

Q. What was on the 20 acre tract was it?

A. I think those wells were all bored just at the northeast edge, or just off the 20 acre tract; and they were all outside the 20 acre tract, if I remember right; very close to the line, however. He made a contract with the company that he was to get so much water at such and such a price; the best well he bored, he struck what was known as the Stowell well at one time, I think well No. 4 on our map here.

Q. We may want to refer to that later on: Now if this is designated as No. 4 on Plaintiffs' Exhibit 1?

A. As is called Well No. 4, 1 [illegible], elevation 1[illegible], on Plaintiff's exhibit 1. I know we were nearly a year or a year and a half getting into the well, getting the tunnel connected with that well; it was quite a tedious task, on account of the strong flow of water; and it was supposed to

flow - it was called a one hundred inch well.

Q. About the tunnel, aside from those wells, which as I understand from you were bored to augment the flow from the tunnel, to what extent did the tunnel water decline?

A. It declined from 72 or 74 inches, in 1890, to about 16 inches in 1896.

Q. Then aside from the water which is fed to the tunnel from wells connecting with it, has the tunnel ever produced since that time, any more than say 15 inches of water?

A. No, sir. I can say that from the measurements made in 1904 and 1905, of the waters flowing into the tunnel at what is known as Weir 4 and 4A, in the shaft at the upper end of the tunnel - and we measured the water again at the mouth, and there was generally 10 or 12 inches more at the mouth of the tunnel than where it was measured above.

Q. That would be the increment of the tunnel, between what you would call the weirs 4 and 4A, and the mouth of the tunnel?

A. Yes, sir; that also would include one well, which is weir No. 5, in Mr. Reed's measurements, which generally flowed from two to three inches of water.

Q. Do you know anything about the subsequent connection of the tunnel with the well No. 14, designated here on the plaintiff's exhibit 1, beyond what you have already stated in describing that well?

A. I have not described well No. 14 at all; it was Stowell well No. 4.

Q. Yes, I know, that is a different well. I am inquiring whether you know anything about the subsequent connection

of the tunnel with well No. 14, of your own knowledge?

A. I know the well, which was under the control of the Fruit Land Company; they bored the well; the Fruit Land Company bored well No. 14, under Mr. Stowell's contract, probably, or under his supervision at least, and the tunnel was run to well No. 14, but they failed to get there during their ownership of the land; they failed to get there, and they had to run a syphon up there to lessen the quantity of water.

Q. Did any of those wells flow at the surface of the ground?

A. Yes, sir; the Stowell well flowed over the surface of the ground; I don't think I would dare state the amount of water it flowed, but it flowed water, quite a little quantity; also well known as well No. 1 of the San Antonio Water Company flowed water over the surface when it was first bored, and I rather think some of the others flowed a little bit, or come pretty close to the surface.

Q. Now then, that well No. 14, and the Stowell well, when tapped by the tunnel, when reached by the tunnel, their water was drawn off through the tunnel, instead of at the surface?

A. Yes, sir.

Q. Do you know if the tunnel was run so as to make a connection with the Stowell well, or was the Stowell well bored in the bottom of the tunnel?

A. No; the tunnel was run to make a connection with it; they had a great deal of difficulty.

Q. Do you know what year that was?

A. I think that I could refer to the dates; I have them

here somewhere ; I don't see anything I have checked in my own books that refers to that; it was possibly '98, or '99, or 1900, one of those three years.

Q. Was the Stowell well capped at any time?

A. I think not; I don't want to state positively.

Q. Was the well No. 14 capped at any time?

A. Not to my knowledge.

Q. Look at this somewhat elongated paper, and which has an inscription apparently intended to describe its character, elevation, depth and so forth, of wells, near red hill, Cucamonga, California, from tabulations, and so forth by E.T. Wright: State whether or not you made this paper, this diagram?

A. I made it, or rather it was made from my data in my office.

Q. Do you know whether it correctly represents the data?

A. The data all came from my note book, taken from testimony in this case.

Q. What is the purpose of this paper?

A. To show the various wells in and around that neighborhood, elevation of the surface of the land, and the elevation of the water in the wells at different dates, relatively with each other, and also the depth of the wells, from the testimony given.

Q. State whether or not it shows also the elevation of the top of the well, or the top of the curb?

A. Those elevations are supposed to be the ground; the elevations on the curb may vary a foot or so.

Q. It shows the depth of the wells?

A. Yes, sir.

Q. And the elevation of the water in the wells at the dates when the observations have been testified to here in the evidence?

A. Yes, sir.

Q. The first one here is described as the Sourwine well: Where is the Sourwine well situated?

A. I don't think I could tell what piece of land it is situated on by description; it is about a mile north of the Base Line.

Q. In what direction from the Cucamonga Springs?

A. Almost due north from the Cucamonga Springs.

Q. Then the sheet shows wells of the San Antonio Water Company, owned and controlled by said company, 1, 2 3, consecutively to 8 and to 9: What wells are those?

A. From one to eight, would be the San Antonio wells north of Base Line, known as the 10th St. wells; 7 and 8 the Baskell wells, and 6 the Rubio well; the rest designated by numbers; 9 is the San Antonio Water Company or Ontario Power Company's well known as No. 14; I put it No. 9 on that map, because I had it 9 at one time.

Q. The colored horizontal marks on this map indicate what?

A. Indicate the dpeht of the well, and the blue color is when they are filled with water, supposed to be the depth of the well full of water.

Q. State whether the map correctly indicates the relative depths of the several wells, that have been mentioned here in the evidence?

A. Yes, sir; it does.

Q. Now, these fine reddish lines on this chart indicate what distance in perpendicular elevation?

A. Each narrow interval, each of the smallest intervals marked in fine red lines, indicates what distance in perpendicular elevation?

A. Four feet.

Q. I observe that you show on this, next following the well No. 14, a representation of well No. 14 on plaintiffs' Exhibit 1, Lone Star Wells: One seems to be under the figure "6" under rather bold lettering, and the other under figure "5": There are those wells? Are they indicated on Plaintiffs' Exhibit 1?

A. They are I think. And they are 5 and 6 on plaintiff's Exhibit 1; 6 being in lot 11, and 5 being in lot 12.

Q. North of the Base Line?

A. North of the Base Line.

Q. Following then on this diagram appear to be references to the Cucamonga Water Company's wells on the 35 acre tract: Where is the 35 acre tract on Plaintiff's Exhibit 1?

A. It lies below the Base Line, and west of Hellman Avenue, and is outlined on Plaintiff's Exhibit 1, with tunnel running northwesterly through the tract.

Q. Now, then there are three of those wells which contain no indication of water?

A. Because I had no data to know how high the water stood in the wells and so I did not put the water on; I had no data to show.

Q. The next is Hellman well No. 2, the west branch of the Y tunnel: That is the well in the northeast part of section

4 which you previously described?

A. Yes, sir.

Q. At the end of the west prong of the Y?

A. Yes, sir.

Q. Then you have artesian well No. 2: Where is the so-called artesian well No. 2?

A. That I have also described today, as being the northerly part of the 90 acre tract; it is a well bored nearly twenty years ago.

Q. Was it ever a producer?

A. Yes, sir; a small producer over the surface, from eight to ten or twelve inches of water.

Q. Did it cease to flow at any time if you know?

A. It ceased to flow some years ago.

Q. There are other wells there, Ontario Power Company, and Cucamonga Water Company, several designations as shown on the right hand side of this sheet: Any explanation that you can make of those as to where they are situated?

A. There is well No. 4, known as the Stowell well in 18[illegible]6; that is shown; and the wells Nos. 7, 8 and 9, as shown on this map of the Ontario Power Company here; they were wells bored by Mr. Stowell or the Cucamonga Fruit Land Company, prior to their selling the property; and the other well No. 4, the Stowell well; the next is Cucamonga Water Company well 10; that is the well bored in 1902 or 1903, finished in 1904 I know, and is in the 90 acre tract, and right near shaft 4 and 4A, and flows water into that shaft, into that tunnel.

MR. CHURCH: You say that was in 1902?

A. 1902, 1903, and 1904; it was finished in 1904, connected in 1904.

MR. BRITT, Q. Connected with what?

A. Connected with the tunnel No. 2, the main supply of the water now flowing to the Cucamonga Water Company.

MR. CHATTAN, Q. Are you not now ten years in advance of the time?

A. I don't think so; it was finished four years ago.

MR. BRITT: Mark this chart as Plaintiff's Exhibit 4 for identification.

MR. BRITT, Q. Look at this chart, which is inscribed Cucamonga Water Company, total water flowing from 124 acre tract, Cucamonga Land and Irrigation Company, from measurements made by Wright, Fitzhugh, and several others named there: Did you make this chart?

A. I will answer the same as I have the other; it was made in my office under my charge; putting the figures and letters on I didn't do.

Q. What is it intended to represent?

A. To graphically show the amount of inches flowing from 1885 up to 1907 or 1908; I think it reaches to this month.

Q. It shows the maximum and minimum of water measured on that tract of land during these times does it?

A. Yes, sir; the maximum was in 1890 of over 300 inches, and the minimum was in 1904 and 1905, of two and some odd inches

Q. What does it show relative to the date of observation?

A. It shows the dates and the observed at each of the times given on the map, showing an interval of '90 to '94 of no measurements taken; the long line between the two points

shows there was no measurements taken, that straight line.
Q. This shows graphically by means of the line to which you refer, not a broken line, the long continuous line here, but having a good many angles in it, shows the result of the measurements which are tabulated in this exhibit 32?
A. Yes, sir; and that No. 32 covers them all.
The COURT, Q. You say this long line indicates no measurement What are these figures here?
A. That is rainfall; you see there is no observer and no date given; that is rainfall for the season.
MR. BRITT, Q. These figures which the Court calls your attention to, are those in the horizontal column, marked at the left, seasonal rainfall at San Bernardino?
A. Yes, sir.
Q. Now, the dates of observation appear on the upper margin?
A. Yes, sir; and the observer on the lower margin on the left hand. Shall I explain it?
Q. Yes. I would like to know what is indicated by these small squares marked with faint red lines?
A. Each vertical square means 100 miners inches, of the large squares, and longitudinally they represent time, being an even space of time.
THE COURT, Q. What is the period of time?
A. The period of time is one year. They are spaced I think exactly for time; the rainfall is put on each year. Those spaces are shown exactly.
MR. BRITT, Q. But that is not so with the observations: The observations were not taken on the same date each year?
A. No, sir.

The Court, Q. You referred to the seasonal rainfall: From what time to what time do you compute that?

A. I think it is September first to September first; I think those are the dates.

MR. BRITT, Q. If each one of the large squares, or squares marked with the heavier red lines represented 100 inches, each one of the small squares would represent 10 inches, or one-tenth of that?

A. Yes, sir.

Q. And the smallest subdivision then would be what?

A. Would be two inches; because there are five to a small space.

Q. This chart will show graphically, and with an approximation to correctness the rise and fall of the water discharged from this tract of land, of the property of the Cucamonga Land and Irrigation Company, for the period of years commencing about 1885, to 1908?

A. Yes, sir. There is one year 1900 to 1901, the water shows an increase instead of a continuing going down, owing to the developments of the Y tunnel that I have already referred to, increased the water for that season.

Q. There seems to be an increase between those measurements, '98 and '99?

A. I haven't got any data with me to know why that was.

Q. Well, about that time was there any work being done on the tunnel No. 2?

A. This would not include that if there was.

THE COURT, Q. What is the meaning of this legend: "Pumping wells above Base Line"?

A. That is simply during those years, they were pumping what is known as the San Antonio Water Company's wells above the Base Line; I suppose that is to infer they were taking the water.

MR. BRITT: We offer this diagram or chart in evidence as Plaintiffs' Exhibit No. 54.

A. Can I make an explanation of that statement that I said I didn't know why it raised that year; you asked me what the cause was and I told you I couldn't remember. It shows the dates of the measurement: One was made in July of the year previous, and the next in April the year following; it hadn't yet got summer time; and it was on account of there being more water in April than in July.

MR. CHAPMAN, Q. What was the rainfall those two seasons?

A. Very light; between seven and eight inches both years.

Q. That is '98 and '99?

A. Well, it shows on the plat there that it is '98 and '99.

Q. Both of those measurements would be included in the season for which the rainfall was computed?

A. The measurements will show the date they were taken.

Q. You say one was in September and the other in the following April?

MR. BRITT: He said one was in July and the other the following April.

A. One was made by Mr. Trask, August 13th, 1898, and the next was made by N.W. Stowell, April first, 1899.

MR. BRITT, Q. This other diagram now shown you seems to be historical of the flow of water at weir No. 8: That is water of the creek proper, isn't it?

A. yes, sir; measured at the end of the 50 inch pipe line.

Q. Which is close to the reservoir and near the brick hotel?

A. Yes, sir.

Q. Tell us the plan and scheme upon which you have proceeded in constructing this chart?

A. Well, that is just simply graphically drawn on the chart, the measurements of the water daily, measurements practically for four years, made by Marsh, testified to, and Reed, testified to, and by myself, as shown by the tabulations already introduced, as shown on exhibits 5 and 11.

Q. It shows conveniently the series of measurements made at weir No. 8?

A. Yes, sir; and also shows the rainfall for the seasons, and who made the measurements, but it is all taken from these tabulations, as far as the measurements go.

Q. What does this broken line near the middle of the chart, what does that represent?

A. That purports to be the amount of water measured on a vertical scale, and the inches are put down every short space; the figures in black mean miners' inches to correspond with the tabulation.

Q. This shows graphically the variation in the measurements during the time you describe, some four years?

A. Practically four years.

Q. Is there anything else there that needs explanation?

A. The last end shows a broken line, because there is a period of dates from June 6th to April, 1907, that we had no measurements at all.

Q. It is not only broken but it is an interrupted line.

A. It is not continuous.

Q. What makes this extraordinary peak here, about February, 1905?

A. It was raining the previous day, and considerable water came down the pipe next day.

Q. Where is the point of lowest depression.

A. One point of depression, May, 1905, 1.58; I think that is because water was turned out; I know that is because water was turned out. Two and eighty some odd hundredths inches, is the lowest it was ever measured; that was in December, 1904. It also shows on the map the dates from the testimony of the pumping of water, of the wells above the Base Line.

Q. That is during the last season?

A. Yes, sir; during the last season, no; but for the four years as shown by the map.

MR. STEVENS, Q. Where is that shown?

A. All along the line it is printed in.

MR. BRITT: I will ask to have this marked Exhibit 35.

Q. Look at this chart, which bears the inscription, "San Antonio Water Company, water flowing through cement shaft, in tunnel No. 2, northwest of the 90 acre tract, from testimony of F. E. Trask, including the water from well No. 9, or No. 14, as per plaintiff's Exhibit No. 1, and wells Nos. 4, 8, 9, 11 and 12: What does this represent?

A. Why it simply represents graphically the amount of water flowing, as per Mr. Trask's testimony last May, and also shows the dates when the pumping was going on, in the wells to the north of the Base Line, and shows the fall of the

water during the um ing, and the rise when they stopped pumping above.

Q. And the broken line across the middle part of the sheet indicates what?

A. Indicates the miners' inches as per Mr. Trask's testimony at the different dates, as shown on the right hand margin.

MR. STEVENS: That is at the top of the diagram?

A. Yes, sir.

MR. BRITT, Q. Now this flow of water through cement shaft in tunnel No. 2, northwest of the 90 acre tract, is a discharge of water from these wells which are mentioned here is it?

A. It includes the discharge from those wells, and any other water gained in the tunnel; it is the total amount in the tunnel, that is supposed to flow down tunnel No. 2 belonging to the San Antonio Water Company.

Q. What is the cement shaft in tunnel No. 2?

A. Well, it is a shaft, I think which was constructed by the San Antonio Water Company, into the tunnel, just northwest of the corner of the 90 acre tract on their land, and they have a measuring box and a weir in there.

Q. Does all the water flowing in that tunnel, in the Eadie Tunnel or tunnel No. 2 pass through that shaft?

A. No, sir; all the water supposed to flow to the San Antonio Water Co pany passes through that shaft.

MR. CHAPMAN: Did you say that was the San Antonio Water Company's land?

A. It may be the Ontario Power Company's land.

MR. CHAPMAN: We object to oral testimony as to the title

of the land.

THE COURT: The objection is well taken.

MR. BRITT: The evidence is not offered with a view to showing any title to the land, but rather the quantity of water in the shaft at different times.

MR. BRITT, Q. I notice there is an inscription on this chart, "Pumping continuously, San Antonio Company's wells" Then that is followed to the right " Not pumped Nos. 1 to 8" and then is the inscription "Pumping continuously" and later still "Not pumping": From what data do you get those inscriptions?

A. From the evidence as presented in May last of the dates of the pumping of those wells.

Q. Now, the inequalities in the long broken line here indicate what, where it rises and falls?

A. Indicates each time the measurement was given at the date, and I drew a straight line to the next date of measurement, and it makes a broken line all together.

Q. What do those irregularities correspond with?

A. Correspond with the amount of water flowing through that cement shaft.

Q. Now, here under this inscription "Pumping continuously, San Antonio Company's wells", this long broken line seems to sag down from the top to the bottom: What is intended by that?

A. It simply shows when they commenced pumping from those wells there was 252 miners' inches flowing through that cement shaft, by Mr. Trask's testimony, when they stopped pumping there was 121 miners' inches flowing through the

cement shaft.

Q. The figures on the upper margin of the sheet, show the dates between the respective entries?

A. They show the dates consecutively, but the entries are shown of the actual dates, as testified to by Mr. Grask, as shown on the broken line itself, as testified to by him. Those are even months on the margin, and he did not measure at the same date every month.

Q. Now, on the right hand part of this sheet there is an inscription "pumping continuously" without other explanation: What is meant by those words there as pumping continuously?

A. Why it is meant from August 16th, 1905, to about November 11th, 1905, that the wells above the Base Line were being pumped every day, and the water fell in that time from 152 miners' inches to 116 is the lowest point.

Q. And after that time the inscription "not pumping" means what?

A. That as far as the date of this profile is concerned, there was no pumping done after that date above the Base Line, and the water rise.

MR. CHAPMAN: Are you offering those things in evidence.

MR. BRITT: I have offered two of them; and I am going to offer this one.

MR. CHAPMAN: Well, I object to it as incompetent; it does not purport to be anything except the artist's presentation of how the evidence in this case will look when depicted on a piece of paper, to a distorted scale.

The Court: The objection is overruled.

MR. Chapman: Exception.

MR. BRITT: It is only to facilitate the digesting of the figures which have been introduced in evidence.

(Last chart referred to admitted in evidence and marked Plaintiff's Exhibit 36)

MR. BRITT, Q. I think you stated that you are acquainted with the lands of the Cucamonga Land and Irrigation Company, and of the Cucamonga Vineyard Company, and their relation to each other, and the quantity of irrigated land: I will ask you if you made this map which I now exhibit to you, or if you know it is a correct map?

A. That was copied simply from the map of the companies property.

Q. Do you know whether it is correct or not?

A. Yes, sir; it is; that is the outside lines are correct, and the vineyard and orchard I presume they are correct, -

Q. And the situation of the reservoir, and the orchard and the San Bernardino road, and the bridge over the wash, and other features marked on the map, do you know whether they are correctly delineated?

A. They are; also the two pipe lines, the 16 and 22 inch pipe lines.

Q. You speak of a 22 inch pipe line: Has that any connection with the so-called 30 inch pipe line?

A. It joins it at the lower end of the 30 inch pipe line, and conveys the water to the settlers, and to class A and Class B.

Q. And the 16 inch pipe line?

A. Is a pipe line laid by the Cucamonga Fruit Land Company and turned over to the Cucamonga Water Company, to carry

their one half of the water from the Y tunnel and the cienegas.

MR. BRITT: For the purpose of showing more clearly the situation of these lands relative to each other, and the situation of the pipe lines relative to the wash, the road called the San Bernardino road, and the Vineyard of the Cucamonga Vineyard Company, the washes which have been referred to here on this land, we offer the diagram in evidence.

MR. CHAPMAN, Q. This don't show the entire Cucamonga Rancho does it?

A. No, sir.

Q. Does it show any lands not inside of the Cucamonga Rancho?

A. No, sir.

MR. BRITT, Q. All the lands here delineated are within the Cucamonga Rancho?

A. Yes, sir

(Map marked Plaintiffs' Exhibit 57, and admitted in evidence)

Q. BY MR. BRITT, Q. Now, referring to this Plaintiffs' Exhibit No. 57, you will notice indicated there location of San Bernardino road?

A. Yes, sir.

Q. Below that is a space which is marked "Vineyard": Do you know what tract of land is indicated on this plat or chart or diagram, and what is called the vineyard there, what is designated as vineyard? A.

A. Yes, sir.

Q. What is it?

Q. What is it?

A. Supposed to be in vines.

Q. Do you know what amount there is?

A. I know from scaling. I know probably within one or two percent of the total amount; I have not surveyed it; three hundred acres would be within one or two acres of correct.

Q. Now, on the land of the Cucamonga Land and Irrigation Company there is also some territory apparently marked "vineyard" on this map? Do you know anything about that?

A. The word "vineyard" crosses the line, including both some of the Cucamonga Vineyard Company, and also the Cucamonga Land and Irrigation Company; and there is vineyard on both portions above the San Bernardino road.

Q. Do you know whether that territory has ever been irrigated

A. It has.

Q. Where from?

A. From the pipe lines as shown on this map, and also from a ditch lying immediately below the 22 inch pipe line which was used by the Vineyard people.

Q. From what source?

A. From the Cucamonga Creek; and that ~~xxxxx~~ lower ditch - the upper one runs from the Y tunnel.

Q. Was there any land of the Cucamonga Land and Irrigation Company, below the 16 inch pipe line that was irrigated from the Cucamonga Springs?

A. Yes, sir.

Q. What was it used for when there was water for irrigation?

A. There was some alfalfa, and I think the vineyard reached a little above the line of the 22 inch pipe line; I am not

sure of that; there was alfalfa and some corn, and some garden to the west of this pipe line.

Q. Do you know whether all that territory which is represented on this map as below the 16 inch pipe line was irrigated?

A. At various times it was.

Q. Do you know how long that irrigation continued relative to the disappearance of water?

A. It continued between the years 1887, and up to 1900; how much later I don't know.

Q. You don't know whether it continued until the water disappeared?

A. That I don't know much about.

Q. What do you know about the possession of these tracts of land, by the plaintiffs in this case, the Cucamonga Land and Irrigation Company, and the Cucamonga Vineyard Company?

A. Why, I only know that what is called the 526 acre tract belongs to the Cucamonga Land and Irrigation Company from statements made to me.

Q. Have you observed anything?

A. I know they controlled it; the Cucamonga Vineyard Company was organized as a company in 1895, and they own the land marked "Cucamonga Vineyard Company.

Q. I was asking you about possession.

MR. STEVENS: Possession and use and control.

(Question, lines 14 to 16 inclusive, this page, read to witness)

A. Mr. Summers was there as superintendent of the companies, and controlled them up to the time Mr. Balch came in as

superintendent five or six or seven years ago.

Q. What companies do you speak of?

A. The Cucamonga Vineyard Company, and the Cucamonga Land and Irrigation Company.

Q. Since their organization in 1895?

A. That was the time of their organization in 1895.

Q. How far back does this possession that you speak of, extend?

A. By their predecessors since 1895.

Q. Well, by the companies themselves?

A. Since they took possession in 1895.

Mr. HASWELL, Q. Do you know the land deeded to R.T. Rundle by the Cucamonga Company, now owned by Matthew Turner and others?

A. If it is the Turner 60 acre place on Hellman Avenue I know that place.

Q. Is that included within the exterior boundaries of the Rancho Cucamonga?

A. Yes, sir.

Q. You know the property deeded to Patricio Marsicano, by the Cucamonga Company, do you not?

A. Yes, sir.

Q. Is that included within the exterior boundaries of the Rancho Cucamonga?

A. Yes, sir.

Q. Do you know the property deeded by the Cucamonga Company to Musselman the twenty acre tract?

A. Yes, sir.

Q. Is that included within the exterior boundaries of the Rancho Cucamonga?

A. It is.

Q. You heard the testimony of George D. Haven this morning in reference to a certain 40 acre tract deeded to him by the Cucamonga Company did you not?

A. Yes, sir.

Q. Is that included within the exterior boundaries of the Rancho Cucamonga?

A. I don't know; I would have to look at the map to feel sure.

CROSS EXAMINATION

MR. CHAPMAN, Q. Have you got the map here?

A. I think I have one at the hotel that will tell that probably.

Q. Do you know along what sections the southern boundary line of the Cucamonga Rancho runs?

A. Not from memory; I have them all mapped out. The map at the hotel I will bring in the morning and hand it to you.

Q. You say you can bring it in the morning?

A. Yes, sir.

Q. What use does the Cucamonga Land and Irrigation Company make of the 526 acre tract?

A. At present?

Q. Yes?

A. I believe it is in grain, most of it.

Q. Irrigated?

A. No, sir.

Q. What crops did that company ever raise upon that land that required water for irrigation?

A. They had alfalfa on the land.

Q. Thereabouts?

A. At one time near where the place is various vineyard at [illegible] substantially portion of their property.

Q. About how many acres?

A. I couldn't tell you.

Q. How long did it remain there?

A. I should think three or four years I saw it there.

Q. Can you approximate the amount of it?

A. I don't think so.

Q. Could you tell us whether it was as high as one hundred acres?

A. Why I could; it wasn't one hundred acres; it was more than one acre.

Q. Probably ten?

A. Probably several times that, but I don't [illegible] I would tell without fifty percent of it.

Q. Have you any means of arriving at that information?

A. Not unless I have some old maps that show it; I don't know that I ever measured it, in fact I know I never did; unless some old maps would give the amount that was filled.

Q. There was that alfalfa grown on the tract of land, the southwestern part of this the same tract?

A. I think it was in the early nineties; but I don't [illegible] of it; '91, '92 or '93.

Q. Was that alfalfa patch the only crops cultivated by the Irrigating Company, the Sacramento Land and Irrigation Company that required water for irrigation?

A. Well, they had a China garden there for some years that required irrigation.

Q. Whereabouts was the China garden?

A. That was southwest of the cienega by the I tunnel.

Q. That is the same one that has been spoken of frequently in the course of this trial?

A. As the China springs; yes, sir.

Q. About how many acres did they have in cultivation there?

A. Somewhere between 10 and 30.

Q. That is all in cultivation now in something else besides vegetables?

A. I believe it is in grain; it is not irrigated now I know.

Q. Well, in the Cucamonga Vineyard Company's lands, is there any portion of it except the 300 acres of vineyard that is in cultivation now?

A. Yes, sir.

Q. In what?

A. In vineyard; that 300 acres represents the vineyard south of the San Bernardino road.

Q. How much has the Vineyard Company got north of the San Bernardino road?

A. I think the vineyard Company own between 50 and 100 acres north of the San Bernardino road.

Q. Altogether?

A. Yes, sir; altogether.

Q. How much of it in vineyard?

A. Probably 50 or 60 acres in vineyard; I couldn't tell you exactly.

Q. When set out?

A. Some eight or ten years ago; possibly 12 years ago.

Q. That would take us back to '96 about?

A. It might have been somewhere along those years.

Q. And it has been cultivated ever since?

A. Yes, sir.

Q. Where do they get water for irrigation?

A. I don't think they have had water to irrigate it, for three or four years at all.

Q. Where did they get water originally for irrigation?

A. From the 16 inch pipe line from the Y tunnel, and from the 30 inch pipe line coming from the creek water.

Q. They got one half of the water from the 30 inch pipe line did they?

A. Yes, sir.

Q. What proportion of the water comes from the Y tunnel?

A. One half; that is one-half belonged to the Cucamonga Vineyard Company and the Cucamonga Land and Irrigation Company; and the Cucamonga Land and Irrigation Company owned one fourth and the Vineyard Company owned three fourths of the half.

Q. Did the Cucamonga Land and Irrigation Company use that one fourth anywhere?

A. I presume they used a portion of it when they irrigated their own land. How they divided it - the same superintendent managed both companies, or both pieces of land.

Q. Both the Cucamonga Vineyard Company and the Cucamonga Land and Irrigation Company?

A. Yes, sir; the same man was superintendent.

Q. Who had control of the waters from the Y tunnel?

A. The superintendent of those two corporations had control of the half of it, and the Cucamonga Water Company had control of the other half.

Q. Where was the half that the Water Company had control of taken to?

A. Through the 16 inch pipe line to the reservoir about a quarter of a mile east of Hellman Avenue.

Q. Does it ever unite with the waters of the 30 inch pipe?

A. It would unite if it was taken in the pipes; the pipes are connected, to flow on down through the same pipes, but not on that tract of land.

Q. They were connected?

A. They were connected xxxxxthex in the Water Company's pipe system.

Q. The Cucamonga Water Company still control that?

A. Yes, sir; there has been no water in it for four or five years.

Q. No water at all?

A. Not a drop.

Q. From the Y tunnel?

A. No, sir; not a bit.

Q. Now, you spoke of the cultivation on these lands of the Cucamonga Vineyard Company, that they were all cultivated at times: did you mean all of it?

A. I didn't mean all the cienegas; I meant all below the 16 inch pipe line, and that was not too bad with cienegas, southwest of the 16 inch pipe line as far as the creek.

Q. Was it all cultivated at one time or at different times, or parts at one time and parts at another?

A. I don't know; I think that some years they cultivated it all.

Q. In what?

A. A large portion of it would be in grain.

Q. Are that they don't irrigate?

A. They did some years when they had plenty of water.

Q. But they don't now?

A. No, sir, they don't now.

Q. Now, I believe you said that the construction of the Y tunnel was commenced in 1904?

A. Yes, sir.

Q. And completed about when?

A. Well, it might have been the latter part of '07, but it might have run in to '08; within two years it was completed any way.

Q. About what was the length of the two branches of the tunnel when it was completed?

A. In the neighborhood of five hundred feet each.

Q. I understand you to speak of laying open jointed pipe in a storage basin: Just describe how it was that the open jointed pipe was laid in?

A. It was the storage immediately south of the mouth of the Y tunnel as shown on plaintiff's Exhibit No. 1.

Q. Yes, where is that? You say it is south of the Y tunnel,- of the mouth of the Y tunnel?

A. Yes, sir.

Q. About how far south?

A. As shown on this map, it is some 175 feet from the mouth of the Y to where is buried element; this map was made in

'99 or 1900.

Q. Was the outline of the cienega different at the time that Y tunnel was constructed?

A. There was more cienega, a good deal.

Q. Extended nearer to the mouth of the tunnel?

A. Yes, sir.

Q. How much nearer?

A. Close to it.

Q. Where was the open jointed pipe laid?

A. From the mouth of the tunnel southerly as shown on this map, to a point marked some box, elevation 1212.

Q. There did it discharge water which was collected by that pipe?

A. Yes, sir.

Q. When was that open jointed pipe laid?

A. I couldn't tell whether it was in '87 or '88.

Q. It was about that time?

A. Yes, sir.

Q. How long after the open jointed pipe was laid was it, before you observed any effect upon the cienega lands?

A. The lower part of the pipe never did affect the cienega land, or the cienega was not affected in the lower portion of it; it dried up the upper portion between the years '87 and 1900, because it was all dry in 1900, between the point marked Cienega on this map and the mouth of the tunnel, and there was cienega there in 1897, there was still running water from the cienega itself into this some size box; a natural flow of water.

Q. Is it now?

A. No, sir.

Q. It is all dried up?

A. Entirely so.

Q. And about what time did it dry up?

A. I don't know that I know, except it was all dry in January, 1904, absolutely.

Q. Wasn't there a very marked difference before 1904, in the amount of water that was flowing in that open jointed pipe?

A. The open jointed pipe also conducted the water of the Y tunnel as well.

Q. You say there has been no water flowing from the Y tunnel for three or four or five years?

A. Not for the past three or four or five years; no, sir.

Q. Did the cienega dry up gradually after you laid that open jointed pipe in there?

A. The cienega began to dry up at the upper end of that open jointed pipe, because it was down 10 or 12 or 14 feet below the surface.

Q. It was put there to drain the waters from that cienega wasn't it?

A. Yes, sir; to collect the waters.

Q. And it did it?

A. It did it.

Q. From the mouth of the Y tunnel down to the sand box, did the waters of the Y tunnel, and the waters collected by the open jointed pipe have the same conduit?

A. Yes, sir.

Q. The waters from the Y tunnel flowed through the open pipe?

A. Yes, sir. There was also another short pipe line, of perhaps 40 or 60 feet only, that collected the waters at the lower end of the cienega and brought it into the same box - what water did not get into that open jointed pipe.

Q. You say there was another pipe: Was that also open jointed

A. No, sir; a tight pipe 50 or 60 feet long, an iron pipe.

Q. Where was it laid?

A. From the sand box in a westerly direction into the cienega, just to collect the waters of the cienega that did not get into the open jointed pipe.

Q. Did it collect them?

A. It collected what came down there.

Q. And carried it into the sand box?

A. Yes, sir.

Q. When was that pipe laid?

A. The same year in 1907.

Q. Did you make any measurements of the water at this sand box then, after the work was done, the Y tunnel constructed, and the open pipe laid through the cienega, and this other pipe that you speak of 40 or 60 feet long?

A. Yes, sir; they are tabulated and introduced.

Q. Could you tell us the dates when you first began to make measurements of that water?

A. The first measurement I have of my own work is July 15th, 1907.

Q. How much water was at the sand box then, flowing from the Y tunnel, with all of its auxiliaries?

A. 16.27 inches.

Q. From what exhibit now are you reading, or to what did you

refer?

A. I think it is Exhibit 32; that was the first one introduced this afternoon.

Q. Then was the next measurement that you made on that?

A. I may have made measurements between times; the next measurement that I have introduced and testified to is July 14th, 1890.

Q. Do you know when the Cadia Tunnel was constructed?

A. Commenced construction in June '86.

Q. To what length did they construct it before work ceased on it at all?

A. Something over half a mile; probably in the neighborhood of 3000 feet.

Q. By what company was that work done?

A. That work was done by the Cucamonga Fruit Land Company.

Q. And what year was it completed for that distance?

A. In the year '90 or '91; it was three or four years.

Q. Then what was done with regard to it?

A. Absolutely nothing for five years.

Q. Was any water flowing from it during that time?

A. Water was flowing through it all that time; the highest measurement is something like 74 or 75 inches; in four or five years it had run down to 15 inches and a fraction.

Q. How much did you say there was at first?

A. 75 inches; not at first; after we got in two or three thousand feet.

Q. By the time you had ceased the work the first time on that tunnel, you had about 75 inches of water?

A. Yes, sir.

Q. And then it ran down to about 18 inches?
A. Yes, sir.
Q. When did it run down to 18 inches?
A. In '96, about five or six years later.
Q. And at that time some other work was undertaken you say?
A. At that time commenced to improve the tunnel by cleaning it out, and boring wells at the upper end to increase the water supply.
Q. Did you do that or was it done under the Stowell contract?
A. Under the Stowell contract, the Fruit Land Company let the contract to do it.
Q. When Stowell had done that work what was the increase in that tunnel?
A. Including the wells that he bored?
Q. Yes, the water from the wells was put into the tunnel.
A. I don't think I could state that, because I don't know just what time the wells were cut in, and I have no measurements with me, except continuing along from year to year.
Q. Can you point out on this map No. 1, where those wells were constructed by Stowell?
A. Yes, sir.
Q. I wish you would show us the place?
A. There is one well constructed just west of the northwest corner of the 90 acre tract, marked well No. 7.
Q. Isn't it a little south of the northwest corner?
A. Yes, sir; south and west.
Q. And just outside of the 90 acre tract?
A. Yes, sir; there was another well just south of that, and marked on Plaintiffs' exhibit 1, well No. 11.

Q. Were those wells sunk about the same time?

A. No, sir; about two years apart.

Q. Which was the first one?

A. well No. 7.

Q. That is nearest to the northwest corner of the ninety acre tract?

A. Yes, sir; there was also well No. 4 on the same exhibit was sunk in 1896.

Q. By Stowell?

A. By N. W. Stowell, and was known as the Stowell well as it was the largest one.

Q. Was that the second or the third?

A. I think that was the first.

Q. The Stowell well was the first?

A. Yes, sir.

Q. And you say this was marked -

A. Yes, sir; well No. 4.

Q. Can you remember about when that well was completed?

A. I think the well was completed in 1896, but it was not connected with the tunnel that year.

Q. But when completed you say it flowed over the surface?

A. It did flow over the surface.

Q. Where did the water go?

A. It was picked up by the Cucamonga Water Company in an iron pipe line right near there and went into their system.

Q. And their system was in part this radio tunnel?

A. Yes, sir.

Q. And that water was conducted into the Radio tunnel by the Cucamonga Water Company?

A. Some of it got into the Radie Tunnel I think, and they carried some of it to the eight inch pipe line through another line; the same system,- the Cucamonga Water Company.

Q. You say that was completed in 1896, but not yet connected with the tunnel: when was it connected with the tunnel?

A. Within the next two years, but it was a long job and hard work - spent much money on it.

Q. From the time it was completed until it was connected with the tunnel, the only water obtained from it was what flowed over the surface naturally?

A. or what we run in from tunnels to tap it, and then syphoned it down into the Radie tunnel.

Q. When did you do that?

A. Well, we were working on it in '97 and '98, probably both years.

Q. How far below the surface did you cut the wall with your syphon?

A. I think we made two cuttings, two tunnels.

Q. At different times?

A. Yes, sir; I know one was about fifty feet below the surface.

Q. And the other was still lower?

A. The other was still lower if my memory serves me right.

-o-

Here the Court takes a recess until tomorrow, Jan. 22, 1908, at ten o'clock A.M.

-o-

IN THE

Superior Court

OF THE

County of San Bernardino

State of California

Cucamonga Vineyard Company, Plaintiff	)	
vs.		Vol. XII.
San Antonio Water Co., Defendant	)	

INDEX.

I. BENJAMIN, Official Reporter

January 22, 1906. Twelfth Day.

E. P. WRIGHT.

E. P. WRIGHT, heretofore sworn and examined, being recalled by plaintiff, testified as follows:

THE WITNESS: I want to make one correction in this exhibit 32 of one figure.

MR. BRITT: I suppose the witness will be allowed to make the correction.

A It is the date of May 20, 1907. It is on exhibit 32, a correction that I am making, of one figure, which is been wrong on the exhibit.

MR. CHAPMAN: Q What is it? A Where it reads 209.00 inches from Weir No. 2, it should be 132.50 inches.

MR. BRITT: Q What is the date? A May 20, 1907.

MR. CHAPMAN: Q Of what weir? A Weir No. 2.

MR. BRITT: In the multiplicity of these plats and exhibits, there are two which I desire very much to introduce, and which I omitted to ask Mr. Wright about. One of them I was under the impression was made by another witness in the case, or other witnesses in the case, and the second is one which we had intended to introduce, and in the hurry of the moment I overlooked it, and I would like to interrupt the cross examination of Mr. Wright, which has not proceeded very far, and ask him about those matters.

THE COURT: Very well.

MR. BRITT: Q I desire, in the first place, to interrogate you about this chart which has the inscription of "Cucamonga Water Company, Hellman Well No. 2, and artesian well No. 2." I do not quite understand why "water" is used

instead of "Vineyard." A I suppose it would be perfectly proper, because the Hellman Well No. 2 is the Cucamonga Land and Water Company land, but one half of the water belongs to the water company; that is the reason it might have been used.

Q This chart was made by you? A Yes sir; it was made by those in my office under my charge.

Q It was designed to represent what? A Designed to represent fluctuations of water in the surface of these two wells, measured one from the top of the casing in well No. 2, down in the shaft about forty feet below the surface of the ground, and the other from the top of the curbing, which is about three feet above the ground.

Q Where is artesian well No. 2 situated? A Artesian well No. 2 is well No. 2 that has been referred to on the 90-acre tract, known as artesian well No. 2 on plaintiff's exhibit No. 1.

Q Can you point out about where it is situated?

A It is near the center of the 90-acre tract at the north edge.

Q Indicated by the words "Artesian Well No. 2?"

A Yes sir. Artesian Well No. 2, 1887, Elevation 1410.

MR. CHAPMAN: Q You mean it is near the north boundary of the 90-acre tract and about the middle of a line drawn across there? A On the center, east and west, but near the northern boundary.

MR. BRITT: Q The Hellman well No. 2 is the well that you have already stated is at the end of the west prong of the Y tunnel? A Yes sir.

Q I understood you to say that this chart shows the fluctuations of water in these wells? A Yes sir.

Q With reference to what? A With reference to dates and with reference to the water having been pumped north of the base line. It is a continuous date from the time they took the measurement, but it shows when they were pumping above base line and when they were not, and how the water went down when it was pumped, and how it was when they were not pumping.

Q The measurements indicated on this chart are taken from what? A On the Hellman well No. 2 they are measured down from the top of the casing, which is the top of the well, where it is cut off to flow into the Y tunnel.

Q Where are these figures to be found in any of these original exhibits? A They are all to be found in plaintiff's exhibit 3. There is one break in a period of some months when there was no measurement taken.

Q At what time? A From June 1906 until April 1907.

Q The column of figures running in an irregular line near the bottom of this map indicates the measurement of which well? A The Hellman well No. 2, and the distance down from the top of the casing, and the straight line through the middle of the map represents the top of the casing, and they are measured down from that casing.

Q And the column of figures---horizontal line of figures drawn near the top of the map indicates measurements in artesian well No. 2? A Artesian well No. 2.

Q Then as this line near the bottom of the map rises or falls it indicates the rise or fall of the water in Hellman

Well No. 2? A Yes sir.

Q And similarly the column of figures near the top of the map indicates the rise and fall of Well No. 2? A Yes sir. It is continued right down to January 7, 1908.

MR. CHAPMAN: Q It begins when? A I think in January, 1904.

Q And down to what time? A January 7, 1908.

MR. BRITT: Q The date of the several measurements are marked where on this chart? A They are marked on the upper edge. The date of the measurements and the observer who measured them is marked on the lower edge of the map, and they are both taken from compilations on Exhibit 3.

MR. BRITT: We offer the paper in evidence as a graphic illustration of the data contained in exhibit No. 2 and exhibit No. 11 (marked exhibit No. 38).

MR. CHAPMAN: Q When did you compile this exhibit No. 38?

A Compiled along in May, the first of May, as far as we had extended that data, and I have added the rest since then.

Q The first of May of what year? A 1907.

Q Where did you get the data from which you compiled it?

A From measurements taken which were in my office and which are all on exhibit No. 3.

Q And what other data than what is on exhibit No. 3?

A None. These are all taken from exhibit No. 3.

Q You say these horizontal lines show what the condition of this well No. 2 and the Mullgan well were when the Sixteenth street wells were or were not being pumped?

A Both when they were and were not.

Q And the diagram will show what the condition was when they were pumping, according to these data, and what the condition was when they were not pumped? A You used the word conditions. It shows the differences in elevations.

Q That is what I mean, the difference in elevations, or the elevations when the wells were being pumped and the elevations when they were not being pumped? A Yes sir.

Q And not in other? A No sir.

Q You have how many measurements are on this map from 1904 to 1907? A No sir. I have not counted them. Much of the time every day and sometimes a week apart, and there were several periods of four or five months when there was no measurements taken, between 1907 and early in 1904.

Q Can you point out these daily measurements? Whereabouts on this diagram do the daily measurements appear and for how long do they appear at any one time? A They appear all the way from August, 1904, practically daily measurements, with occasionally a Sunday intervening, until June, 1906.

Q These measurements were all taken by Reed?

A There might have been occasionally one taken by myself, but they were all from Mr. Reed's testimony.

Q Substantially they were taken from Mr. Reed's testimony?

A Yes sir.

Q Does Mr. Reed make any observations as to whether any other wells than these Sixteenth street wells were being pumped at the same time or at any time during these observations? A I don't know. I think that he reported when the Lone Star well, which is the upper well on the Lone Star tract, were being pumped. I think he reported of that,

but I am not positive.

Q You didn't put that on this map? A I did not, but I think he made reports of it.

Q Does this diagram show whether or not any other well in that district or territory which is the subject of this controversy was or was not being pumped, only these Sixteen street wells? A There are no other wells in that immediate territory being pumped.

Q I am not talking of the immediate territory in the sense of being within a few feet. But we have the Cucamonga ranch with wells scattered all over it. Were any of those wells reported to you, and did you mark on this diagram whether they were or were not pumping about this time? A There was no well reported to me as being pumped unless it was well No. 9 of the Lone Star Tract. That might have been reported.

Q And if it was reported it is not marked on this map?

A No sir.

Q Was any report made to you or observed by you concerning the condition of the weather at these times---the rainfall---whether it was or was not raining? A Mr. Marsh made reports of the measurements made by him generally in 1904 every time there was any rainfall.

Q Did you make any note of that on this diagram?

A It has no place on that.

Q I am not ~~talking~~ asking you that. You didn't make any report? A No.

Q Did you make any observation of the amount of rainfall in the different seasons that this diagram extends over?

A Only from the official report made at San Bernardino.

Q You did examine them? A Yes sir.

Q Did you make any observations on this map as to what the season's rainfall was during the different seasons?

A I don't think the rainfall is on this particular map.

Q There is nothing on this map except the pumping or not pumping of the Sixteenth street wells; and the elevations of the water in wells No. 2 and the Hellman well?

A And the name of the observer who took the record.

Q I am speaking more of the condition of the ground; there is nothing else noted on this map? A No there is not.

Q Now whereabouts is the Hellman well? A The Hellman well No. 2 is at the west end of the Y tunnel.

Q The Hellman well No. 2 is the one which this diagram exhibit No. 38 deals with? A Yes sir; and artesian well No. 2 on the 90-acre tract. Those two wells.

Q Where is the Hellman well No. 2? A That is at the west end of the Y tunnel.

Q Where is Hellman well No. 1? A It might have been intended to be at the east end of the Y tunnel. If so, we have no measurements on it.

Q The Y tunnel is marked on plaintiff's exhibit 1, and the Hellman well that you speak of is xxxxx near the west end, or at the northern end of the west branch of the Y tunnel? A Yes sir.

Q Whereabouts are the Sixteenth street wells? A They are all located on exhibit No. 1, and are numbered 1, 2, 3, 4, 5, 6, and then Haskell wells No. 1 and 2.

Q Does your diagram note what particular wells were being

pumped? Does it give them a name or a number? A Yes sir.

Q In each instance? A It claims to, each time the wells were pumping; but I see there is a blank space of some distance, for some months, and some of the wells were stopped for a day or two at a time, I know. But it is headed such and such wells pumping.

Q You are reading from a place on this diagram which says "San Antonio Water Company pumped Well No. 5, San Antonio Water Company pumped wells No. 3, 4, and 5, and Haskell Well No.2---" What space does that cover? A July 14th, 1894, to January, 1905.

Q But you know during that time some of those wells were not pumping? A Sometimes they stopped pumping for a day, and then others would pump during the time, but they pumped continuously.

Q All of them? A No. I don't think so. But some of them stopped for a day while they were being repaired.

Q There was some pumping going on during that time?

A Yes sir.

Q But not all being pumped at once? A There was only five ~~xxxxxxxx~~ there.

Q And they were not all going at once? A Some days some were being repaired, I know.

Q Have you any idea how many of them? A It is what we call continuous pumping, and we reported it continuous pumping. But some days there would be a well that would be changed. I know that. When they had to fix the pumps.

Q The first one of these entries is "San Antonio Water Company pumping 2 wells." Does your diagram show what wells

were being pumped at that time? A Well, all the information was supposed to be taken from exhibit No. 3, and I presume it does.

Q The next one is San Antonio Water Company pumping Tackell well and wells 2 and 4. Over what period of time does that entry go? A It should run till the next entry is made there.

Q Next, San Antonio Water Company pumping Tackell well and well No. 4. That runs to the next entry? A Yes sir.

Q San Antonio Water Company pumping Tackell well. That runs to the next entry? A Supposed to. That is the intention.

Q And the next is San Antonio Water Company pumping Tackell well No. 2. That runs to the next entry and so on through here, wherever you have made use of these remarks, this condition continues till the next one? A That is the intention.

Q But in some instances you cross this intention is not carried out? A I know for a space of five or six months----a well can pump five or six months without stopping.

Q If there should be any discrepancy between this diagram, exhibit No. 20, and exhibit No. 3---the record contained in exhibit No. 3, could you tell us which is most likely to be correct? A I should suppose exhibit No. 3 would be, because the diagram was supposed to be taken from exhibit 3.

Q And was intended to conform to it? A Yes sir.

Q Does exhibit No. 3 show the continuous pumping from one day to another as you have marked them here? A Yes sir. I don't say for each individual well. There may be one day that one well is not pumping.

Q I mean the same information which you have on diagram

exhibit 3c will also be contained on exhibit 3? A Yes sir.

THE COURT: You mean by that that diagram 3c is not intended to contain any original information? A No sir.

Q It is simply a graphical representation of what is set forth on exhibit 3? A Yes sir.

MR. BRITT: Q Mr. Wright, look at that and state what it represents? A That represents a line supposed to show the fall of the land from the mouth of the canon to the lower---

Q What canon? A The mouth of the Cucamonga canon to the lower end of the Red hills, and xxxx is taken from the government geological map by scale.

Q. On what scale is this drawn?

A. 400 feet to an inch longitudinally, and I think 1000 feet between each of these main lines. 1000 feet is marked on the map .

Q. The scale is distorted, that is, the longitudinal scale is greater than the pependicular?

A. It is 100 feet between the lines up and down, and 1000 feet the other way. Ten times as much longitudinally than it is the other way.

The Court: Q. It is magnified that way ten times?

A. Yes, sir. The figures are all marked on the map, showing the distances.

Q. What is meant by the dotted line marked respectively east side and west side, near the lower left hand corner of the map?

A. That is supposed to represent the east side of the creek and the Red Hill. This is taken from the geological map.

Q. The map of the Cucamonga quadrangle already in evidence?

Is that the map referred to as the map of the geological survey?

A. Yes, sir.

Q. I notice at one point on thisline exhibiting the profile, appears the inscription "Top Sixteenth Street well" What is meant by the term "top" in that connection?

AIt means the surface of the ground at that point.

Q. And vertically below that on the map appear the figures 1376, elevation in May, 1907, of water. What do those words signify?

A. The elevation of thewater in the well at that time, from Mr. Cousin's testimony in this case.

Q. In thedotted line which bears the inscription "west side" appear the words "top well n0/ 1 ." What is meant by those words?

A. The ground elevation at well no. 14.

Q. Vertically below appear the words "bottom Eady Tunnel", with the figures 1293.94."

A. That is the elevation of the bottom of the tunnel or the surface of thewell where it is cut off in the tunnel at that point.

Q. Further to the right and under the dotted line appear the words " Cucamonga Springs". What do those words signify?

A. That signifies the elevation from the testimony here where the springs rose as testified to by Mr. Cousins.

Q. The figures he gave were 1[illegible] feet. They are notmarked there, but I inquire of you whether that is the measurement to which you refer as the elevation determined by him?

A It is not; because those springs are located on here as

1 away below that.

2 Q. My recollection may be at fault. That was merely my memory.

3 Mr. Chapman. Let him finish his answer. Will you continue with

4 that? Will you explain what it is on that diagram?

5 A. I should have said before,-- where it is marked as

6 Cucamonga Springs is at the head of the 30-inch pipe line and

7 not as testified to by Mr. Cousins.

8 Q. What have you spoken the diagram? You have not stated

9 what those figures are.

10 Mr. Britt. He hasn't any figures there at all.

11 Mr. Chapman: Q. What have you spoken there? You have some figures

12 here, have you not?

13 A. That is simply the elevation 1250. It does not refer to any

14 thing except the elevation of the ground at that point. It is

15 supposed to be the elevation of the ground there.

16 Q. Supposed to be by whom?

17 A. Taken from the scaling of the geological map.

18 Q. And you put it there?

19 A. Yes, sir.

20 Q. Which one of those lines marked the 1250 foot elevation?

21 Which one is it? The one which is underneath the figures?

22 A. Yes, sir; the one running parallel with it.

23 Q What are these characters here?

24 A. That explains itself. 1276 is the elevation of the

25 mouth of theEady Tunnel.

26 Q. That marks the spot at the mouth of the Eady Tunnel?

27 A. No: where the water comes out.

28 Q. I mean on this diagram, the place itself, the 1276 feet,

29 that is at the line itself right at the words "Mouth of Eady

Tunnel"?

A. Yes, sir; it is the continuation of the straight line.

A. And at the 1250 foot mark is marked the elevation of the line which is underneath the figures?

A. Yes, sir; itis the main line.

Q. What is the difference between those two? 26 feet?

A. That is the difference.

Q. What is the course of that line?

A. It is about 14 degrees south, 30-- Simply by the protractor on the government map. That is supposed to represent the bottom or straight line of the Eady Tunnel.

Q. And what is the elevation of this other extremity of it?

A. 1293.94.

Q. What is the course of the Eady Tunnel under theground?

A. It is south and about 12 to 20 degrees east. But it meanders around at the upper end, and this line is drawn straight.

Q. The general course of itfrom the upper extremeity i --

A. About South, 15 or20 degrees east.

Q. What is the line that intersects this longer line between the place on top of theSixteenth Street wells of theSan Antonio Company, no. 1, and theplace marked"two wells" and runs off to the rightband end of the map?

A. That is supposed to represent the surface of the ground . taking a straight line over the center of the Red Hill, and an elevation markod1472 at the top is simply from the geological map and is the elevation of that hill.

Q. Have you marked the Cucamonga Springs on that diagram, or the place where they are on the ground?

A. No, sir.

Q. Do you know anything of a well orwells owned by the Old Settlers' Company?

A. No, sir: I do not. I know by hearsay that they have one.

Q. You have never been to it?

A. No, sir.

Q. And you don't know where it is?

A. I don't think I do.

Mr Britt: I would like to dispose of this chart, if you are ready to proceed with your general cross examination.

Mr. Chapman: I don't want to leave this chart or number 38 till I ask another question or two.

Q. The Old Settlers' well does not figure on your chart exhibit36?

A. No, sir.

Q. Nor on this profile?

A. No, sir.

Q. No difference between the elevation at the Old Settlers' well and the Cucamonga Springs, nor well no. 14, nor any comparison between the Old Settlers' well or anything else?

A. The Old Settlers' well does not appear in any chart or testimony that I have had any connection with, nor the Lone Star wells. They do not appear on this. But it does on a good many other things.

Q. It doesn't on No. 38, does it?

A. No, sir.

Q. Do you know where theSunset wells are?

A. I know abot where they are, but particularly I don't know.

Q. They also do notfigure in either of these charts, no. 38, nor this one which I suppose is to be no. 39?

A. No, sir.

Q. Nor on Exhibit 3?

A. No, sir.

Mr. Britt: We offer this profile to which the witness testifies, as Plaintiffs' Exhibit No. 39.

Mr. Britt: Q. There is one question suggested by Mr. Stevens abot this chart No. 39. Hereat the lower right hand corner, the words "Cienegas, 1899" appear: What do those words indicate And there is also some shading.

A. These words and lettering indicate, the figures from 1370 to 1410, and colored ~~xxxxxx~~ blusih on the edge, represent the elevation of the water as it stood in the cienegas in 1899-- the elevation of the water on the surface. Q. And the figures '99 indicate the year 1899?

A. Yes, sir.

Q. Mr. Wright, in 1899 when you had your measurement of the w water on the east side of the Red Hill abo t which you testified, was all the water on that side measured at the Creek Division Box, or, as it has sometimes been called, Weir No. 8? Was ther any other water naturally discharging from the springs at that time, which was not measured at the Creek Division Box?

A. Yes, sir; there was a good deal of water.

Q. I am speaking of the natural flow.

A. Yes, sir. The cienegas were flowing. The China cienega and the cienega below the "Y" Tunnel was flowing in 1899.

Q. You observed the water in '85 and '86?

A. I have none of my measurements. It was Mr. Fitzhugh and Colver.

Q. Was there any stream of water proceeding from the cienega before the "Y" Tunnel was built, before there was any development was there? A. Yes, sir.

Q. Which joins the creek below the 30 inch pipe line?

A. When it was not diverted for irrigation it joined the Creek some 500 to 800 feet below the head of the pipe line, just above the present county bridge.

The Court: Q. You mean there was a continuous stream unless it was interfered with?

A. Yes, sir.

Mr. Britt: Q. Do you know about what quantity of water?

A. Only by Mr. Fitzhugh's measurement in '85.

I haven't any measurements of my own.

Q. You saw the stream?

A. Yes; I saw the stream.

Q. Did you see it more than once in early times?

A. I saw it a good many times in those early days. We measured it two months before we commenced work on the "Y" Tunnel, but we didn't get it all, because a part of the China cienega was further west.

Q. That was before the construction of the "Y" Tunnel?

A. Yes, sir.

Q. How was that stream as regards being continuous?

A. I only knew it one season before we commenced the "Y" Tunnel.

Q. Were you familiar with it after that season?

A. Yes, sir.

Q. How was it then?

A. It was flowing a good stream.

Q. Uniformly? The same size stream?

A. It was the same collection as the other cienegas.

GEN. BRITT: Q. What was the cienega called from which that stream emanated?

A. Called in theFitzhugh measurement, theChina Cienega. Afterwards we callled one cienega below the Y tunnel and the other the China Cienegas. At the time of Fitzhugh's measurements they were called the China Cienegas.

The Court: Q. You never applied the term "China Cienega" to the one west of the"Y" Tunnel?

A. Oh, no: itis about two or three hundrdd feet.

Q. Wher the vegetable garden used to be?

A. Yes, sir.

CrossExamination.

Mr. Chapman: Q. How many cienegas are ther in that vicinity, orhow many were there when you first knew the country in /885?

A. This exhibitno. 1 shows that pretty fairly, except that it does not show the area of them. They are contracted considerably after 1885 up to 1899. There is one called Picnic Cienega on the northwest corner of the 40-acre tract. That was quite a little cienega, and it is not shown on this map.

Q. There were several different cienegas?

A. Yes, sir.

Q. And they were of different elevations?

A. All the cienegas would come within 30 or 40 feet of being about the same elevation.

Q. When you constructed that "Y" Tunnel what effect didit have on the cienegas which you have been speaking of, and the flow of the stream, in 1885 or '6?

A. The stream certainly diminished some, as the near accounts show. And the cienegas contracted at the head of the cienegas, four or five hundred feet from the mouth of the tunnel. It was practically dry in '99.

Q. Do you remember what the season of '85 and '6 was as to the amountof rainfall?

A. I don't think I do. I could refer to it, but I don't think I remember.

Q. Don't you remember that one of the biggest floods we ever had in this country was in March, 1884?

Mr. Britt: Those figures are in evidence on some of these charts.

Mr. Chapman: Where is the chart?

A. I have it right in my pocket. I could say by referring to one of thetables.

Q. Well, look at it and see.

A. 1885 and '6?

Q. Yes.

A. The rainfall was 21.83 here in San Bernardino for the season.

Q. And what was it the year before?

A. 10.81.

Q. And the year subsequent? A. 14.50

Q. Does the memorandum that you have there show the the of the year the principal part of that 21 inches took place?

A. Yes, sir.

Q. When was it, in February orMarch?

A. February there was 2.52, March 4.18, and April 4.46.

Q. What month was the greatest rainfall?

A. March.

Q. Do you remember what exhibit it is that has already been introduced that shows the outlines of the Cucamonga Ranch?

A. There has been no such exhibitintroduced. I handed you one this morning that shows all of the land to be affectedin this suit.

Q. ~~Is it~~ Isn't there any map introduced here yet that shows the entire Cucamonga Rancho?

A. Not to my knowledge.

Q. Who made this map that I show you now?

A. That is a white print ofwhat is called part of the Cucamonga Colony land, and the yellow line represents the outline of the Cucamonga grant, as I putition myself from the patent, on the east, south and west, as far as this map will allow it to be shown.

Q. But it don't give it entirely?

A. No, sir:. it does not give the north part.

Q. In your direct examination you testified that you resurveyed these subdivisions and sectionized inside of the rancho, and that you made it conform to the United States government survey of public lands outside and adjacent to the rancho.

A. Yes, sir.

Q. Does this map show any of those outside lands on the eastern side of theCucamonga ranch?

A. Yes, sir.

Q. Is not the east half, the entire east half of section 11, township 1 south, range 7 west, outside of the Cucamonga grant?

A. It is .

Q. Is that true of any other portion except the east half?

A. No, sir.

fx And the section 2 of the same township-- section 2, the east half is outside and the west half inside of the rancho.

Q. Whereabouts is the center of section 2 and 11?

Does the Cucamonga Ranch line run through the center of those sections?

A. Yes, sir.

Q. The east half is outside, and the west half inside?

A. Yes, sir.

Mr. Chapman: If there is no objection I would like to offer this in evidence.

A. It is simply a white print from our Cucamonga Company's land that we have a tracing of at my office.

Mr. Britt: I suppose it is offered to illustrate this crossexamination?

Mr. Chapman: Yes.

Mr. Britt: No objection.

(Defendant's Exhibit A.)

Q. Did you know theCucamonga Ranch lands prior to '85?

A. Only from driving over the ranch and spending two orthree days in '85.

Q. What part of the ranch?

A. From Ontario north to the canyon, and eastward to the Cucamonga winery, and then east of that to the ranch limits

Q. Did you pay any attention to the waters of Cucamonga stream or springs at that time?

A. I think I made nomeasurement of water in the west stream, at least I have no record of it. I can't find the record.

Q. What time in '85 was that?

A. I couldn't tell you; I don't remember.

Q. What do you refer to as the west stream?

A. The water that was then flowing across the San Bernardino county road at the west side or edge of the Red Hill.

Q. Wasn't it flowing on thewest side of the hill at that time?

Q. Was it flowing on the west side of the hill at that time?

A. It was water all rising within that section from the cienegas and so on, and came down and flowed across the county road.

Q. Did the stream flow then in the same channel between those two hills that it did at the time represented by this map?

A. What do you mean by between the hills?

A. There is a sort of a depression marked here where this stream comes through the Red Hills in section 4.

A. I understand that this blue mark represents the flow of the wash of Cucamonga Creek.

Q. Whereabouts did that west stream flow of which you spoke ?

A. It crossed the San Bernardino road near the southwesterly part of lot 3 in section 9.

Q. And represented on this plaintiffs' exhibit 1?

A. Yes, sir.

Q. And from what direction didit come in crossing this road?

A. Nearly north and westerly of north.

Q. It flowed on the west side of the hill? Then it was in this 90-acre tract?

A. Yes, sir. It comes on practically the same wash that is there now on the ground.

Q. You say you have no record of the measurement you made at that time?

A. No, sir; I was with Mr. Lynch Senior and we made a measurement, I am quite sure, quite roughly, as he was interested in it.

Q. Have you any recollection of what the amount was?

A. Only vague. I can tell you what I think it was.

Q. What do you think it was?

A. I think it was something upwards of about 75 inches.

Q. But you don't remember the time of the year?

A. It was quite warm weather. That is the only factor I can remember.

Q. I believe it was in '85 that you first became interested in the lands in that section yourself?

A. Yes, sir.

Q. And you spoke of being one of four or five purchasers of a seven-thousand acre tract?

A. Yes, sir.

Q. What did that 7000 acres include? Where did it lie?

A. I could probably tell a little better from that last exhibit, because that practically shows the 7000 acres.

Q. The exhibit itself?

A. Yes, sir.

Q. Did that 7000 acres extend from the eastern side of the grant to the western side?

A. Not to thewestern side, except the interest that we had in the contract with the Chaffeys-- that the Chaffeys were to pay for, over to the west, and that is part of Ontario now.

Q. The brown or yellowish brown lines on that diagram which has been introduced as defendant's exhibit "A" marked the boundaries of the ranch?

A. Yes, sir.

Q. Did your purchase include anything else except what was in the ranch?

A. A majority of our lands was outside of the ranch.

Q. Which side?

A. The east and south.

Q. Does Defendants' Exhibit "1" show the entire tract that you purchased?

A. I think the entire map will take in all of the purchase.

Q. How do you describe it on this map?

A. It is mostly represented by lines of subdivision into lots in the different sections.

Q. Both inside and outside?

A. Inside and outside of the grant; and later, the next year or that fall, we purchased more inside of the grant, from the Cucamonga Homestead Association, in section 4 and section 5.

Q. That was within the grant line?

A. Yes, sir.

Q. Did you buy any interest in the 326 acre tract?

A. No, sir; except that we had one half of the water flowing from it.

Q. Does this subdivision inside of the grant have any particular name?

A. We always named it in sections. I continued the government sectionizing.

Q. Where was the Iowa tract?

A. It was about a mile north of the line of the Cucamonga Homestead Association. That is on defendants' exhibit 1.

Q. It is notpart of the lands which you purchased?

A. No, sir.

Q. Did you make no investigation into this water problem

before you bought into that?

A. As far as I have any record of any measurement, I have not. I saw the water flowing, and J. C. Lynch who had been the manager of the Cucamonga Company for some months previous had been over it back and forth, and I bought in with him.

Q. How many of you were interested in the purchase?

A. Originally three of us got the deed. Mr. Wicks, Lynch and myself; but I took a half interest-- half of my interest was intended for Mr. Hodgkins.

Q. There were more than three of you that were first concerned in the purchase?

A. Four.

Q. Who was the other one?

A. M. L. Hodgkins.

Q. The recordof the first measurement that you made was that of '89?

A. The first record that I have got of my own.

Q. Did you or your company ever cultivate any of those lands yourselves?-- of the 7000 acre tract?

A. I think only by leasing to other people.

Q. What was the first work that was done there to obtain any water from the 526 acre-tract after your purchase?

A. I think the first work that was done was the laying of the 30-inch line from the creek division box.

Q. About when was that done?

A. Either the fall of 1905 or early in '06.

Q. Was the construction of this "Y" Tunnel a part of the work that was done to obtain water from that tract?

A. Yes, sir.

Q. By what company was that done?

A. By the Cucamonga Fruit Land Company.

Q. Was that a company organized by you and your co-purchasers?

A. Yes, sir.

Q. And the purchase that you made was transferred to it?

A. It was all transferred to Frank A. Gibson and he transferred it to our corporation.

Q. The Cucamonga Fruit Land Company?

A. Yes, sir.

Q. What was the next work done after the construction of the Y tunnel, looking to the same ends?

A. The next improvement was on the west side of the Eady tunnel-- of any consequence, I mean.

Q. And that was begun by the Cucamonga Fruit Land Company?

A. It was begun and completed as far as that period of it went.

Q. Who put down this well no. 14?

A. I don't know whether it was the Cucamonga Fruit Land Company or N. S. Stowell, acting for the company.

Q. If Stowell didit it was under a contract with the Cucamonga Fruit Land Company?

A. Yes, sir.

Q. At that time theEady Tunnel had been extended up to this well?

A. Well No. 14.?

Q. Yes, sir.

A. No, sir; it was over 50 feet from it or a hundred, and

possibly 200.

Q. How high did the water stand in well no. 14 when it was first put down?

A. My memory is it flowed over the top.

Q. How deep was it?

A. I can't tell you off hand. The measurements are in here.

Q. Do you remember when that was done? Was that in '97?

A. No, sir; it was not '96. It was later.

Q. '97?

A. I think you will find better testimony than mine. Mine is memory only. I think it was '97, myself.

Q. After it was put down -- was it completed or was it afterwards low red?

A. I think it was never lowered, but that I don't know; not to my personal knowledge.

Q. When was that well first cut down?

A. To what depth? You mean cut down to the tunnel?

Q. Not from the Eady Tunnel; but you say that well was cut down, if I remember rightly, some time not a great while after it was sunk, or was that well no. 2?

A. That was the Stowell well, or well no. 4 that I testified that to.

Q. Where is that?

A. On the tract a little northwest from the 90-acre tract, and now flows into the Eady tunnel.

Q. That is the Stowell well?

A. Yes, sir.

Q. Wells no. 1 and 2 were not put down by Stowell.?

A. No, sir; they were put down by the Cucamonga Fruit Land Company under contract with somebody, and 20 years ago or more. I think it is over twenty years.

Q. That well or one of them was cut down?

A. Yes, sir.

Q. When was it first cut down?

A. Along about '95, I should judge. It was cut down about 20 feet.

Q. Was the water then siphoned into the Eady Tunnel?

A. Not at that time. That water never did run into the Eady Tunnel that I know of.

Q. How did they conduct the water from that well?

A. It came down through a little ditch or a lower tunnel that was run into it afterwards, and then into a measuring box on the surface northwest from the 90-acre tract, and carried down in an 8-inch iron pipe.

Q. To where?

A. To the west side of the hills to the Cucamonga Water Company.

Q. It never did enter the Eady Tunnel?

A. Not unless it was a small portion of it. There was only a small quantity entered.

Q. Did the waters from the Eady Tunnel and this well ever unite at any place?

A. Not unless it was right at the head, unless it happened to be turned into the shaft

Q. It was conducted by independent conduits to the place of use, wherever that may have been?

A. Yes, sir.

Q. When was well no. 2 cut down the second time?

A. I don't know that it was ever cut any lower than so as to flow out of the surface. It is still standing at 60 feet above the tunnel now.

Q. Was the water diverted by the same means all the time?

A. As long as the water flowed out; but it stopped flowing years and years ago; no water flowing since 6 or 8 years ago.

Q. What well is that?

A. Artesian Well No. 2.

Q. Now, well no. 1.

A. I think that ceased flowing about twelve years ago. It never did flow but three or four or five inches.

Q. Was that ever siphoned into the Eady Tunnel?

A. Never.

Q. What water was it that was carried into the Eady Tunnel by siphons?

A. The Stowell well no. 4. But that was only temporary for that year, while we were trying to get the tunnel to tap it on a grade.

Q. To tap well no. 4 on a grade?

A. Yes, sir.

Q. Did they do that?

A. Yes, sir.

Q. When was the Stowell Well No. 4 put down?

A. In 1896., it was started, I guess, and finished the same year perhaps.

Q. And siphoned into the Eady Tunnel?

A. Probably the next year they commenced to siphon.

Q. About how much water did it carry then?

A. I don't know how much it carried. The well was estimated to flow about 100 inches. It didn't flow that over the surface, but it was estimated at 100 inches at the tunnel.

Q. And you don't know how much of it flowed through the siphon?

A. Not all of it, but 30 to 50 inches went in.

Q. Did the Eady Tunnel eventually connect with that well?

A. Yes, sir.

Q. About when was that accomplished?

A. Sometime in '98 or '99.

Q. And about how far below the surface of the ground was the Eady Tunnel when it did cut that well?

A. Very close to 100 feet. I haven't got the exact figures.

Q. About how much water did the well give at that time?

A Approximately 100 inches.

Q. How long was it before the Eady Tunnel was extended to cut that well no. 14?

A. That was along in 1903, before they got the connection made, and possibly 1904. But that would show better by the records of thePower Company.

Q. By whom was that accomplished?

A. The connection was made either by the Ontario Power Company or the San Antonio Water Company.

Q. The Cucamonga Fruit Land Company had before that disposed of the tunnel and xhaxxkxxd xrxxxxxthexxxxkk? well both?

A. It had disposed of thewell and the land around thewell.

Q. How near had the Cucamonga Fruit Land Company come to this well no. 14 with this Eady Tunnel before it disposed of it?

A. I don't think I have any record. Perhaps 50 or 60 or 80 feet. They had already run in one tunnel, trying to siphon some water over.

Q. Did they accomplish that?

A. They helped ease the water.

Q. How much did they get into the Eady Tunnel when the Eady Tunnel itself tapped Well No. 14 on the grade of the tunnel?

A. I don't know. It was a good stream of water.

Q. Did you make any measurements of the total amount of water flowing from the Eady Tunnel after the well 14 was run through this upper tunnel and siphoned into the Eady Tunnel?

A. Not unless the measurements may have been shown at the mouth of the tunnel on this Exhibit 32.

Q. Would Exhibit 3 show it?

A. No; that only shows from '94 down.

Q. What is it that you have in your hand that you say may show it?

A. Exhibit 32 that was introduced yesterday morning. It may show the amount of water running at different times.

Q. Can you tell by the measurements that appear on that or quantities of water ascertained by measurements that were made after the tapping of Well No. 14 with the upper tunnel and the siphoning of the water into the Eady Tunnel, and where the Eady Tunnel had reached the Well No. 14 on the grade of the tunnel?

A. I don't think I could tell accurately. I don't know the date well enough.

Q. What were you ~~xkingx~~ making these measurements for?

A. Most of these measurements at that time were made for the purposes of the McPherson case.

Q. That case was tried in 19[illegible]?

A. In February and March 19[illegible].

Q. And ~~xxx kxxx xxxxx~~ many of these measurements, which were introduced, were made, prior to the commencement of the suit?

A. Many of the older ones were made before. Many of them made to estimate--, well, to get the amount of water flowing for the purposes of the stock of the Cucamonga Water Company.

Q. That is, to deliver to them the amount which the stock called for?

A. To deliver to them the amount the stock called for, as near as we had it to deliver.

Q. Didn't you in the course of your efforts in that section of the country to increase the water supply, make measurements from time to time to ascertain the effect of what you had done with refrence to increasing it?

A. Why, yes.

Q. When you sip oned part of this water of Well No. 14 into the Eady Tunnel didn't you make measurements to ascertain the extent to which you increased the waters of the Eady Tunnel?

A. After that Well No. 14 was begun I only went there personally by request, as I had already lost or disposed of all my interest in the Fruit Land Company. I had no personal

interest. I wentout when I was hired to do certain things. Mr. Stowell was in entire charge.

Q. Had you disposed of your interest in the Cucamonga Fruit Land Company till after the conveyance by that company to the Ontario Power Company?

A. I disposed of my interest at least twelve years ago. I think it was '93 or '4.

Q. Have you made your measurements there for the purpose of ascertaining the quantities of water and the increasing and diminution since that time? yourself?

A. Yes, sir; as I was hired to go out and do it. I have a record of my measurements.

Q. You were then employed for the purposes of the controversy with McPherson and others?

A. Yes, sir.

Q. Your first measurement of July 13, 1899, at the Division Box in the creek showed a flow of 184.55 inches.

A. Yes, sir.

Q. There had been a measurement made by Culver previous to that?

A. The year previous; yes, sir.

Q. And there was a considerable quantity less in '99 when you measured than when Culver measured?

A. Considerable more.

Q. When you measured it?

A. Yes, sir.

Q. And when was your next measurement ?

A. The year following.

Q. When was it then?

A 260.03 inches.

Q. Do you remember the character of the season of '89-90 as to the quantity of rainfall?

A. Yes, sir.

Q. What was it?

A. It was very heavy.

Q. Was it the heaviest that you have ever known in this country?

A. Not the most inches fall-- I think I know one that was heavier, but it was perhaps the next heaviest.

Q. Which was the heaviest?

A. I think it was in the '70's; but that is only memory.

Q. But since you bought into the Cucamonga country in '80 the season of '89 and '90 was the season of greatest rainfall?

A. Yes, sir; to my knowledge.

Q. And your next measurement was made when?

A. The next measurement I have was September, 15, 1894. That is, four years later.

Q. And what was it then?

A. The main a ream was 160.31 inches.

Q. What time of the year was that?

A. September 15.

Q. Then your next measurement?

A. June, the year following; '95.

Q. And was what?

A. 19[illegible].53 inches.

Q. Do you remember what the character of the season of 1894 and '5 was?

A. Yes, sir.

Q. What was it?

A. It was a good season. It was a wet season.

Q. And the next measurement was 1050 and '9 : How was that season?

A. That was a short rainfall.

Q. When did you measure it?

A. I didn't personally measure next-- the next three measurements I have were made by Mr. Trask.

Q. And they were what?

A. 169 . It was 152.40 inches.

Q. And the next?

A. 104.90.

Q. And the next?

A. ~~Xxxx~~ 76.68.

Q. How was the season of '96 and '7 for rainfall?

A. That was a fair average season.

Q. And what was the first measurement in the following summer or fall?

A. 104.90

Q From your observation in that section of country and your experience generally how long after a season of rainfall , whether it be great or small, is it before its effect is fully felt down in the vicinity of theCucamonga Springs?

Mr. Britt: Objected to as not proper cross examination. Mr. Wright has not been introduced here for the purpose of so-called expert evidence, and this is calling for opinion and conclusion of the witness about matters as to which I don't know whether he is prepared to give scientific evi-

Stenxxxx xxx denon or not. I think I do know that it is not proper cross examination.

The Court: Was he examined on expert lines on the former hearing??

Mr. Chapman: This is not expert opinion, but it is an observed fact from the time of the season's rainfall when the stream below was affected by the rainfall, and I am speaking of this country during the time he has known it, from '85 until this time; and I submit that the cross examination of this witness or any other in this case on this subject ought not to be brought within such very narrow limits as counsel insists upon. We know that the sole object of all the witness's examination in chief is to suggest to the Court's mind that the tunnel or the Eady Tunnel and the Sixteenth Street wells and the Fourteenth Street wells have an effect in diminishing the water in the Cucamonga Springs and perhaps in other places where they are claiming that the waters have subsided since these things were done. Now we think we can show the same factors that they are endeavoring to present to the Court were taking place before there was any Sixteenth Street or Fourteenth Street wells connected with the Eady Tunnel, and even as early as the very beginning of the Eady Tunnel; and we ought to be permitted to show more to the end that the Court may judge of the value of the testimony, and the proper inferences or conclusions be drawn from the whole situation.

The Court: Your idea is that it is not an expert opinion, but rather an observed fact?

Mr. Chapman: An observed fact.

MR. Britt: I agree with counsel that the witness may be interrogated as to any facts which could illustrate the case between the boring of a well in one place and the disappearance of the stream in another. But he is asked here for a conclusion. And unless he is an expert witness and accustomed to make these deductions, the Court is as competent to draw such a conclusion as the witness. And he ought not to be interrogated, we not having offered Mr. Wright for the purpose of scientific or opinion evidence. He ought not to be interrogated on conclusions at all, but may be interrogated as to facts and figures from which the Court will draw conclusions.

The Court: The only question is the purport and effect of this question. (Question read.) I think the question involves not only observation but expert knowledge as well.

Mr. Chapman: Q. I will frame the question differently. Have you observed as a fact, Mr. Wright, that after a season's rainfall, there does appear any difference in the amount of water flowing in the Cucamonga Crock at the Cucamonga Springs?

A. I have observed that there is more; but we always use and I always used to believe and do yet, that we don't feel the effects in the Cucamonga Springs or in this particular locality the full effect the first season following the heavy rain.

Mr. Britt: I ask that the answer of the witness be stricken out as not responsive to the question and, secondly, it is expressive of deductions or conclusions upon a matter--

The Court: His answer is like Judge Chapman's question. It covers both branches. He says I have observed and then also

states a theory. The motion will be granted. I think you had better read the question to the witness and let him answer.

Q. Did you observe as a fact that after a season of heavy rainfall there would be an increase of waters in the Cucamonga Springs some time or other subsequently? Don't say when, but did you observe that such a fact followed.

A. Yes, sir.

Q. Have you observed it more than once?

A. Yes, sir.

Q. About how long after the season's rainfall would it be before you observed that fact or that effect?

Mr. Britt: I think that is a legitimate question, relating to the witness' observation; but I don't want the witness to embark in a theoretical statement of what he believes ..

A. I have observed an increase, somewhat. But the effects continued over the next ~~year~~ season.

Q Have you observed after years of small rainfall that it has been followed by an observed diminution in the quantity of the stream?

A. At future times; yes.

Q. At about what length of time?

A. Before the springs and ciénegas could show the effect much it would be a year or more.

Q. About when did the Cucamonga Springs begin to diminish in quantity from year to year as you have observed?

A. You refer to the creek water?

Q. Yes, sir; the creek water.

A. They have generally diminished every year ever since

'90, except the year '95 when they increased slightly, and the past year, 1907 they increased over what they were two years ago.

Q. How was the year '95 and '6 and '96 and '7 as to the amount of rainfall? as compared with three or four or five years previously?

A. '95 and '6 there was a very light rainfall; '96 and '7 was an average rainfall.

Q. And how was 1894 and '5?

A. A heavy rainfall.

Q. And '93 and '4?

A. Very light.

Q. And '92 and '3?

A. That was an average rainfall.

Q. How much?

A. 19.82 down here.

Q. And 1901 and '2?

A. That was a good average. 17.42.

Q. And 1902 and '3?

A. That is a mistake. That answer of mine about 1901 and '2 is wrong. It was 11.15.

Q. And 1902 and '3?

A. 17.42.

Q. And 1903 and '4?

A. 9.37.

Q. And 1904 and '5?

A. 20.75.

Q. And 1905 and '6?

A. 19.[illegible].

Q. And 1906 and '7?

A. 22.81.

Q. In your direct examination you were asked if you knew about the history of the so-called Sixteenth Street wells of the San Antonio Water Company to the north of Base Line, and you answered that you only knew the Sixteenth Street well which you thought was Well No. 1 of the San Antonio Water Company that commenced in '96 or thereabouts.

A. Commenced pumping; yes, sir.

Q. And the Haskell well was some years later and commenced possibly in 1899, that that was the next one they did commence pumping. You were then asked what did you notice as to the disappearance of the water in the Cucamonga Springs on the East side of the Red Hills subsequently to the operations of the San Antonio Water Company in the Haskell well and other wells north of Base Line. You answered that the water of the Cucamonga Springs fell quite rapidly after 1899 as shown by the various measurements. Did you notice anything along in the years from '95 and '6 down to 1901 and '2 other than the pumping of the Haskell wells that concurred with this falling off in the Cucamonga Springs?

A. Do you mean any other developments or pumping in that vicinity?

Q. Or climatic conditions.

A. The years were dry. They were what we call dry years in '99 and 1900.

Q. And any other years about that time?

A. Yes, sir; there was a series of dry years.

Q. During that period of dry years did you notice generally that there was a falling off in the waters of the springs

in Southern California?

A. Yes, sir.

Q. In the year 1900 do you know what if anything was done with reference to the "Y" Tunnel?

A. Yes, sir; I do.

Q. What was it?

A. It was deepened at the upper end and lowered nearly 10 feet so as to make a better grade-- not a steeper grade. And there was two wells bored at the upper end of each branch.

Q. And they flowed?

A. They flowed into the tunnel.

Q. That was in 1900?

A. Yes, sir.

Q. What time in 1900?

A. Commenced work in May of that year and they possibly completed it that year or early the next year.

The Court: You have given some figures on the rainfall in San Bernardino. How far in a straight line is the scene of this litigation from San Bernardino?

A. I could state better by the map, but it is approximately twenty miles, and almost due west.

Q. How does the rainfall compare in the two vicinities?

A. I think there is more at Cucamonga than there is here.

Q Can you give us any idea of how much more?

A. Only from statements from others. I think there is 10 or 15 per cent. more there than there is here.

Mr. Chapman: Q. Where?

A. At Cucamonga.

Q. Rainfall?

A. Yes, sir.

Q. In this plaintiff's exhibit 37 I see that there is a square inside of which there is marked 526.97 acres. Is that the same 526-acre tract or a representation of it on this diagram in the Cucamonga Ranch of which we have been speaking?

A. Yes, sir.

Q. Inside of the same square is marked Cucamonga Land and Irrigating Company. What is that intended to designate?

A. Intended to designate that they are the owners of the land .

Q. Intended to designate that the Cucamonga Land and Irrigating Company is the owner of that land?

A. Yes, sir.

Q. That is the tract of land of which you say you bought one-half of the waters in it?

A. In 1885.

Q. The Cucamonga Land and Irrigating Company had not been organized at that time?

A. No, sir.

Q. As I remember it was incorporated in 1885?

A. Yes, sir.

Q. The "Y" Tunnel is constructed in that tract of land, is it not?

A. Yes, sir.

Q. And the waters which it develop come from that tract?

A. Yes, sir.

Q. Did you have any arrangement with the owners of the

other half of that water about the construction of that "Y" Tunnel?

A: Mr. Heilman represented the other owners. At that time there was five owners in the tract and he was one of the five, and he practically controlled it as far as the say-so, and he gave us the permission to go in and construct the "Y" Tunnel and trench out the ditches and lay the pipe, and they received half the water and we received the other half.

Q. That is the way the division came to be made? You made it with the owners of the other half of the waters?

A. Yes, sir.

Q. Did they pay any part of the expenses of development?

A. Unfortunately they did not.

Q. Where is the Lone Star Tunnel? Is the place where that tunnel is located included within the bounds of the tract that is represented on that Exhibit 37?

A. No, sir.

Q. It is indicated on the tract on Exhibit 1?

A. Yes, sir.

Q. The head of that tunnel is on what tract of land? How is it described?

A. It is in lot 11-- I don't see the block-- of the Cucamonga Homestead Association.

Q. And north of Base Line?

A. Yes, sir.

Q. About how far north?

A. About a thousand feet or a little less.

Q. Where are the two wells of the Lone Star tunnel?

A. They are shown on Plaintiff's Exhibit 1 at the head of the tunnel, and well no. 5 which is in the northeast corner of lot 12.

Q. And how far is that well no. 5 from the Base Line?

A 620 or 630 feet.

Q. And going from east to west, which is the most northerly, the Sixteenth Street wells or the Lone Star Wells No. 5?

A. Lone Star Well No. 5 and the Sixteenth Street wells are all on practically the same line east and west

Q. Do you know what the contours are there? They are not represented on that map, are they?

A. I have no data to tell me the contours there any more than the geological map would tell. I have the elevations written on every well on this map.

Q. What is the elevation?

A. Well No. 5 is 1380 feet; and of the east Haskell well or well no. 8, 1385 feet. Five feet difference.

Q. And the Haskell well has the greater elevation?

A. Yes, sir.

Q. How is it with the Rubio well?

A. That is down in an arroyo and is 1390.

Q. What do you mean by "arroyo"? Do you mean in the Cucamonga wash?

A. I have been reading those elevations of the water. I didn't mean to do that. I do not see the elevations of the two Lone Star wells there.

Q. Howis it on these other wells? Is it the water elevatio or the surface of the ground?

A. They are both given on the other wells.

The Haskell well, 1461, is the ground elevation, and the water was 1398 at that date.

Q How was the water elevation at the Lone Star No. 5?

A. 1388; and the ground elevation is 1439.

Q. Now on these western wells nos. 1 and 2, are the elevations marked there?

A. Elevation of well no. 1, 1490, ground elevation.

Q. And the water?

A. I don't see the water there at all. It is marked on some of these other exhibits. It is marked on an exhibit turned in by Mr. Cousins last May.

Q. Both the water elevations and the surface of the ground?

A. Yes, sir; they both are marked.

Q. About when did the China Garden cienegas dry up?

A. On the east side, do you refer to?

Q. Yes, sir.

A. They practically dried up in 1898 and then we developed or tried to develop a little more, so that we had a small flow in 1900. But they were mostly dry in '98.

Q. Do you know about when they began to dry up?

A. They began to dry up, that is to say, they decreased very fast at the time of putting in the "T" Tunnel in '86 and '87.

Q. And was the water never restored after that?

A. No, sir; the tunnel and trench was too near them. They were never restored back to what they were originally.

Q. Do you know anything of theChina well, so-called?

A. I know where it is, and that is all.

Q. Do you know when it was bored?

A. I know about when it was bored. I might miss it one year.

Q. About when?

A. About '98.

Q. Where is that well?

A. It is west and a little south of the Hellman Well No. 2-- between there and the Creek.

Q No. 2?

A. Yes, sir; at the end of the "Y" Tunnel. It is south and west of it.

Q. About how far? What are you designating as Well No. 2?

A. Hellman Well No. 2 at the end of the "Y" Tunnel.

Q. And not this well to the west?

A. No, sir.

Q. How far from that?

A. Somewhere from 600 to 800 feet; possibly 1000.

Q. Which was the last of those springs to dry up?

A. In the creek itself?

Q. Yes, sir.

A. They never did dry entirely. They always flowed something.

Q. There was water flowing from the China Cienega when you first knew it?

A. Yes, sir.

Q. And that, you say, has all dried up?

A. Yes, sir; in 1899 and 1900 the China Springs was all dried up. We tried to push in a little pipe line and we got something for that season, but it run out.

Q. That was cut below the surface?

A. Yes, sir; 10 or 20 feet below.

Q. Was that the last of the cienegas to dry up after it raised?

A. No; because at that time the cienega below the mouth of the "Y" Tunnel was still running some water in 1900 and 1901.

Q. And when did that cease to flow?

A. I don't know. It was all dry in January, 1904.

Q. How long before had it dried up?

A. I don't know.

Here the Court takes a recess until two o'clock.

AFTERNOON SESSION:-

Mr. Chapman: Q. Mr. Wright, I spoke to you this morning concerning the Lone Star Tunnel. I believe there is more than one Lone Star Tunnel, is there not?

A. There is a Lone Star Tunnel that was dug along in the latter part of the 80's at one elevation, and since then from about 1900 they have connected below the tunnel that runs through the 90-acre tract and goes up into the Lone Star tract, at perhaps 60 or 70 feet lower elevation.

Q. And what is the length of that tunnel last constructed that you speak of, in 1900?

A. I could only tell it by scaling on the map.

Q. Can you show it to us on the map?

A. Yes, sir; the last constructed tunnel starts just above the center of section 3, above the Old Settlers' sandbox, on plaintiffs exhibit 1, and is delineated on the map exhibit 1 to Base Line, and from there it is now constructed to about Well No. 5 and the Lone Star tunnel on the northeast corner of the Lot 17.

Q. That is the one constructed in 1900?

A. That is the one constructed or finished up in 1901 and '2.

Q. Constructed and finished up?

A. Finished up. It was commenced in '97.

Q. And it is the extension of the same tunnel?

A. It is one continuous tunnel from the center of section 3 to the northeast corner of Lot 12.

Q. And from there above?

A. There is another tunnel above, but that is the first elevation of about 60 or 80 feet higher.

Q. Are they both connected?

A. No, sir; they are at different elevations. When the water is pumped at Well No. 6 it flows to the surface and comes out at weir no. 5 on the surface of the ground.

Q. And the other connects with well no. 5?

A. In the lower elevation it connects with well no. 5 and taps that well.

Q. What is the elevation of the ditch which taps the well?

A. I don't believe I know the exact elevation.

Q. Do you know the elevation of the Lone Star tunnel?

A. I think I have got data that I could look up to tell that.

Q. Will you do it? Will you look it up?

A. I will look it up with pleasure, only that I don't know that I have it in San Bernardino. I may have to wait till I go to Los Angeles to do it.

Re-Direct Examination.

Mr. Britt: Q. You spoke of the surface stream flowing on the west side of the Red Hill in '65.

A. Yes, sir.

Q. What became of that surface stream?

A. It ceased flowing as a surface stream some time in '88, '89 or '90, during the summer seasons, after Tunnel No. 2 was excavated.

Q. That Tunnel No. 2, is sometimes referred to as the Eady Tunnel?

A. The same tunnel.

Q. How was that constructed with reference to the surface stream that you have mentioned?

A. At the lower end it is some three to five feet above the bottom of the creek or stream, and runs on a grade line-- I think it is a pretty steep grade-- about .2 of a foot to a hundred feet. But by the time it has gone a few hundred feet it is below the level of the stream. The stream that used to come out right west of the portal of the Tunnel No. 2 has ceased to flow.

Q. As the grade of the tunnel ascends what was its position with reference to the bed of the stream?

A. It got below the bed of the stream, of course.

Q. You never made any measurements of that stream?

A. I don't think I ever got any measurements of that. That was where the stream was measured by Fitzhugh and Culver. Both of their measurements, I think, are here.

Q. In answer to a question by Judge Chapman I think you said yourself and some associates laid a 30-inch pipe line about 1866 or something of the kind.

A. Thereabouts. '86 or the latter part of '85

Q State whether that was the first appliance for the taking of the water of the Cucamonga Springs for irrigation purposes.

A. No, sir; it was the first appliance that the associates, Hodgkins, Wicks and myself put in there. It is the first work that we did. It had been used before in an open flume and a ditch carrying it around to the Old Settlers and half to Heilman et als.

Q. When you went there and acquired the interest that you have mentioned was the water at that time in use for irrigating purposes?

A. All of it during the irrigating season.

Q Was that so of the stream from the China Cienega as well as that which was afterwards taken into the 30-inch pipe?

A. Yes, sir; that is on the east side that you refer to?

Q. Yes; on the east side of the Red Hill.

Q Where was that water then being used?

A. One half was being carried over to what is called the Cucamonga Colony and the other half is being used mostly on the vineyards, and some on the orchards-- on Heilman's land.

Q. Reference has been made on previous occasions to the Cucamonga Colony. What was that Cucamonga Colony?

A. Well, it was certain settlers, Manchester, Smith et al. that bought land of the Cucamonga Company-- the San Francisco company.-- prior to our purchasing the interest there, comprising four or five hundred acres, and afterwards &i called Class A and Class B, in the deed that we made to

the Cucamonga Water Company

Q. That colony and those lands that you mention were in what direction from the Cucamonga Vineyard?

A. East.

Q. About how far?

A. They adjoin the Cucamonga vineyard for about a mile north and south and reached over east, some of them, as far as a mile. They are all shown on that exhibit no. 1 of defendants that Judge Chapman introduced.

Q. What use did they make of the water?

A. They used it on orchards that were then planted.

Q. Concerning this artesian well no. 2, who used the water from that well?

A. The Cucamonga Water Company. It ceased to flow some eight or nine or ten years ago.

Q. Has it been used at all since then?

A. No, sir.

Q. I understood you to say it ceased to flow about '94.

A. It ceased to flow on the surface about 1894. But some time about '97 or '8 or '9 there was a tunnel run in called Tunnel No. 5 by the Cucamonga Water Company connecting it with the surface about 300 feet to the west of it, and there was water used from it as long as that flowed, which was perhaps one or two years.

Q. Have you any correction to make in your testimony relative to the connection of the Eady Tunnel and the Stowell well? I understood you to say in your cross examination that it was in about 1897.

A. That the Stowell well was connected with the Eady Tunnel?

Q. Yes. I don't know that you have. I have heard you discussing it since.

A. Discussing it since, which was this noon, I guess I was wrong by about a year. I think it was 1900 that it was actually connected on a level. It was siphoned during '98 and '99-- siphoned into the tunnel considerable of the water.

Q. I understand you to say that the wells at the ends of the two prongs of the "Y" Tunnel were bored about the year 1900, the tunnel then deepened, and that the well then flowed into the tunnel.

A. That is so.

Q. Do you know how long those wells continued to flow into the tunnel? Do any of your measurements show?

A. None of my measurements show. I only measured at the mouth of the tunnel and my last measurements were 1901, and they were still flowing into the tunnel then, and I have no measurements since.

Mr. Chapman: Q. With whom were you talking at noon which led you to change your ideas as to the time when the tunnel was connected with the Stowell well?

A. N. W. Stowell.

Q. The well that you refer to there is this same well that is called Well No. 14?

A. No, sir.

Q. Which one is it?

A. Well No. 4. Known as theStowell Well. It is Well No. 4 on plaintiff's Exhibit 1.

Q. Where did you say this water was used that was taken off

of the 526 acre tract and taken east and used by those colonists--

A. I said half of it was taken east and used by the colonists that purchased land prior to 1903.

Q. What were those colonists?

A. They are individuals that bought property of the Cucamonga Company, the San Francisco corporation.

Q. Was there any name of that colony?

A. No, sir.

Q. Where did they get water prior to the construction of the "Y" Tunnel?

A. They had water from the creek waters, and their deeds all read as their interest is to the whole ~~xxxxx~~ water-- from the cienegas-- they used half of the water.

Q. Where did they divert it from the creek?

A. Practically where the 30-inch pipe line heads. And it came out in the wooden flume and an open ditch.

Mr. Haskell: Q. Did I understand you to say that when well No. 14 was first constructed at the head of the Eddy Tunnel that the water was run into the tunnel by means of a pipe line or a siphon or something of that sort?

A. I don't know as it was the first six months or the first year, but it certainly was for some three years. It was run into the tunnel mostly by a siphon.

Q. Do you know at what elevation above the tunnel as the tunnel now stands that the opening of the well stood?

A. Only from memory. I have no figures with me to tell.

Q. Could you tell approximately?

A. I think it was in the neighborhood of 50 feet below the

surface, which would be about 55 feet above the bottom of the tunnel.

Q. There are other wells that were siphoned in for a time into the Eady Tunnel?

A. Only one.

Q. What well was that?

A. The Stowell well or Well No. 4.

Q. How high did that opening stand above the floor of the tunnel when it was siphoned in-- approximately?

A. I think there were two ~~xxxxx xxxxxxxx~~ tunnels run into that well, by the Cucamonga Fruit Land Company or E. K. Stowell, and perhaps one was 40 feet and the other 0 feet or something like that, below the surface. But that is guess work and just from my memory.

Q. Subsequently these wells were cut off level with the floor of the tunnel, or approximately so?

A. Yes, sir.

Q. Do you know by any measurements or by any other means of knowledge whether or not the cutting of those wells increased the flow in Well No. 14 and in the well that was also siphoned into the tunnel?

Q Increased more when it was siphoned in?

Q. Yes, sir.

A. Of course, it did.

Q. About how much?

A. I haven't anything of my own figures except measurements at the mouth of the tunnel to tell just how much.

Q. Can you tell from measurements at the mouth of the tunnel approximately.?

A. Not enough so that I would want to testify to it.

The measurements are all in here and you can see it at different ~~times~~ dates.

Q. Do you know whether or not the boring of Well No. 14 diminished the flow of those wells that fed that tunnel?

Mr. Chapman: Now are you asking for an expert opinion?

Q. I am asking him as a matter of fact. Do you know as a matter of fact if the other wells that fed the tunnel diminished in flow after well no. 14 was cut off at the level of the floor of the channel, or approximately so ?

A. I do not.

Mr. Chapman: Q. I neglected to ask you when that west stream dried up. You say after the tunnel no. 2 was run the west stream that you found in '53 disappeared.

A. I said within one or two years after the tunnel was started there was no water running down there during the dry season.

Q. How much was here running in the tunnel at that time?

A. The measurements show that there was in the neighborhood of 60 or 75 inches.

Q. That stream had dried up before the Cucamonga Fruit Land Company made any transfer to the Ontario Power Company, did it not?

A. Yes, sir.

Mr. Haskell: Q. Well No. 14 was an artesian well, that is, a well that naturally flowed?

A. I don't know myself whether it ever flowed over the surface or not.

Q. But it did at the point where it was cut off?

A. I don't believe we ever had it trenched in to carry

the water away, whether by carrying it above the surface or siphoning it into the tunnel.

Q. At the point where it was cut off it naturally flowed?

A. The main volume of the water was there.

Mr. Chapman: Q. I understand you to say that the water from Well No. 14 was siphoned into the tunnel.

A. It was.

Q. Do you know when?

A. Only from the matter that it was finished and completed in 1904 and the well was started about in 1900 or 1901, and it was between those dates.

Q. Well No. 14?

A. Yes, sir.

Q. You think it was started in 1900 or 1901?

A. One of those two years. It was started by the Cucamonga Fruit Land Company.

Q. They had made that transfer before 1900, hadn't they?

A. No, sir; they had not.

Mr. Haskell: Q. How near to the surface did the water stand if you know in Well No. 14 when it was first bored?

A. I have no record of my own that tells that.

Q. Have you any remembrance of it approximately?

A. I think it came pretty near the surface as far as I remember, but I don't remember. I have no records to tell.

Q. How near, according to your recollection?

A. I can't tell you.

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N. V. STOWELL.

N. V. STOWELL, a witness produced by plaintiffs, being first duly sworn, testified as follows:

Direct Examination.

Mr Britt: Q. You reside in Los Angeles, I believe?

A. Pasadena.

Q. And you were formerly a good deal of the time in the neighborhood of Cucamonga Springs in this county of San Bernardino?

A. Yes, sir.

Q. When did you first observe the flow of the water at the Cucamonga Springs? The flow of water on the surface?

A. 1870.

Q. Do you know where the socalled Red Hill is in the vicinity of the Cucamonga Springs?

A. I do.

Q. In 1875 did you notice the water conditions appearing in the surface of the ground on the east side of the Red Hill?

A. I didn't go above the San Bernardino road. I know the water was running across the road at that time.

Q. What time of the year?

A. April.

Q. Do you know what was called the Y tunnel, constructed in those ciénegas, on the east side of the Red Hill?

A. Yes, sir.

Q. Have you some measurements of water emanating from the "Y" Tunnel, commencing about the end of the year 1901, and lasting then for a great part of the following year?

A. I have.

Q. I wish you would give us those measurements, Mr. Stowell. First, I will ask you if you know how to measure water.

A. I have measured water, and I think I understand it.

Q. Speaking roughly, state whether you have had any experience or extensive experience in the art and practice of measuring water?

A. Yes, sir; since 1875 I have had occasion to measure water a great many times.

Q. Give us the measurement, if you have it, of the water proceeding from the "Y" Tunnel and the Tuscarora Springs in December, 1901.

A. I have a measurement December 25, 1901.

Q. What are your figures?

A. The depth on the weir was .249, on a three-foot weir.

Q. .249 of what?

A. Of a foot.

Q. Over a 3-foot weir?

A. Yes, sir; and two end contractions.

Q. Anything further to be said in that connection to enable the computation of the quantity of water then flowing to be made?

A. I will simply state that the weir was in the same condition that it had been for a long time previous, when other engineers had measured it.

Q. For what length of time, approximately?

A. The year previous the weir had been practically in the same condition.

Q. With those figures that you have there can this computation be made by one who knows how?

A. Yes, sir.

Q. What is the next measurement that you made?

A. January 9, 1902.

Q. State it.

A. Depth on the weir was .246; width, 3 feet.

Q. That decimal .246--

A. Thousandths of a foot.

Q. 246 thousandths of a foot?

A. Yes, sir.

On February 21, I have one.

Q. State it if you please.

A. I measured on that date .246 on a 3-foot weir. And measuring the same water of the cienega south of the "Y" Tunnel it was .174, over two weirs 27 inches in width each of them.

Q. Is that the equivalent of .174 in depth and 54 inches in width?

A. Yes, sir; there were four end contractions. There was a bar across the weir.

Q. Does that afford means of computation?

A. Yes, sir.

Q. That was February first, 1902?

A. Yes, sir.

xx. The next measurement is March 30, 1902. The "Y" Tunnel is not in there on that day.

Q. How about April 25, 1902?

A. April 25, I have a measurement. The depth on the weir was .219, a three foot weir. And below there the cienega and the "Y" Tunnel together, the depth was .170 of a foot,

two 27-inch weirs.

Q. On May 11, 1902, was there a measurement of the "Y" Tunnel at that time?

A. At 12:45 P. M., "Y" Tunnel, depth .209, width 3 feet.

Q. On May 21?

A. May 21, 11 A. M., "Y" Tunnel, depth .188 of a foot, width three feet.

Q. Was there a measurement on June 3rd?

A. I don't find any on that date.

Q. July 11?

A. I find one on June 6.

Q. Give us that measurement.

A. 8:40 A. M., "Y" Tunnel, depth .116 of a foot, width 3 feet. "Y" Tunnel and cienega, depth .079, two 27-inch weirs. June 30 is the next one. 2 P. M. "Y" Tunnel , depth is .08 of a foot, width 36 inches.

Q. On July 11?

A. July 11, the "Y" Tunnel and the cienega, depth 3/8 of an inch, 2 27-inch weirs.

Q. That would be about how much water, if you can state without entering into a computation?

A. Less than five inches.

Q. September 2, 1902.

A. On September 2 there was no water there.

Q. Or from the cienega?

A. No, sir.

Q. Did the water ever return there to your knowledge?

A. It never has.

Q. You saw that place and observed it afterwards?

A. Yes, sir; the water was several feet below the surface at that point when I was there after that.

Q. These measurements indicate that the water disappeared at that point between July 11 and September 2, 1902?

A. I have no measurements between those dates.

Q. Now, Mr. Stowell, do you know the locality of the Old Settlers' Box?

A. I do.

Q. Is that a measuring point?

A. That is a division point for dividing the water that comes from the 30-inch pipe. It is about the center of section 3, on Hellman Avenue.

Q. Look at this map, Plaintiffs Exhibit 1, and see a point there marked "Old Settlers Sanbox." What water was divided at that point?

A. The water that went to the Old Settlers-- what we called the "Inch-to-8" people. That was taken out of the stream going to the Cucamonga Water Company at that point.

Q. What was the relation of the water flowing at that point to the water at the place called the Creek Division Box?

A. The Creek Division Box takes the water from the Cucamonga Creek below the cienegas, and at the Creek Division Box one half of the water went to the Cucamonga Vineyard Company and the other half went over the 22-inch pipe to the Old Settlers Division Box.

Q. What sort of a conduit was it between those two boxes?

A. A cement pipe, tight.

Q. Laid under ground?

A. Yes, sir; without any openings in it.

Q. Then what was the relation between the water flowing through the Old Settler Box, so-called, and the quantity of water at the creek Division Box ?

A. It would be half of the whole flow of the stream.

Q. Now I inquire of you whether you have a series of measurements made by yourself of the water at the Old Settler's Box?

A. I have several measurements.

Q. State them in your order and state them or so much of them as will enable one who knows how, to compute the quantity flowing.

A. I will state that the Old Settlers' portion in the division was through a slot two inches in hight and ~~xxx~~ 1[illegible].92 inches in length.

Mr. Chapman: Q. Over the weir?

A. It is not a weir measurement. It is through a slot, under pressure.

Q. Do you know how many inches it was?

A. It was supposed to be 3[illegible].84 inches, under a four-inch pressure. The box was so constructed that if more than that water came into the box it ~~xxxxx~~ ~~nax~~ went through an overflow which was 124 inches long, so that quite alarge surplus over the 3[illegible].84 inches would make but very little difference in the hight over the slot, being a very long overflow. At that date there was no overflow.

Q. What date was that?

A. January 5, 1902. And they were taking all the water which came through the slot under 3-7/8 inch pressure from

the center.

Mr. Britt: Q. 3-7/8 over the center of the opening?

A. Yes, sir.

Q. Was that all the water at that point?

A. That is all the water there was. The next measurement I have was on the 21st of February, 1902. At that time they were taking the amount or quantity which would flow through that opening under 4-1/16 inch pressure.

Q. The opening being 16.92 inches long and 2 inches high?

A. Yes, sir. It was a slot cut through a steel or iron plate and beveled to a sharp edge.

Mr. Chapman: Q. Didn't you say something about 4-1/16?

A. That is the pressure behind the opening, above the center of the opening.

On April 25, 1902, at 11:35 A. M., the same opening was filled with water under a 3-1/16 inch pressure.

Q. Have you another measurement on May 11?

A. May 11, 1:10 P.M., it was flowing through the opening under a 3-3/8 inch head.

Q. On May 21?

A. May 21, under the same conditions, at 11:35 A. M., under a 2-3/4 inch pressure.

Q. June 3?

A. On June 3 there was not water enough to fill the opening.

Q. What was the depth of the stream?

A. The depth of the stream was 1.81 inches in depth, 16.92 inches in width. It formed a weir at that time-- without pressure.

Q. July 11?

A. July 11, 11:05 A. M., the depth was .172 of a foot and 16.92 inches in width.

Q. Not enough water been to fill the opening?

A. No, sir; There was about 16 or 17 inches.

Q. Have you any later measurements at that point that year?

A. I don't see any other measurements. Yes, there is another measurement on October 16, 10;10 A. M., 1-3/4 inches in depth, 16.92 inches in width. I don't see any other measurements.

Q. Now are you acquainted with the weir or locality of the weir or measuring box or other ~~xxxxxxx~~ device for measruing water, some distance west of the mouth of the Eady Tunnel, through which water taken by the San Antonio Water Company was carried to Ontario?

A. Yes, sir; I built the box.

Q. What is the distance?

A. About 3000 feet from the Eady Tunnel.

Q. Have you some observations or results of observations of the quantity of water flowing at that point?

A. Yes, sir; a great many of them.

Q. What water is that? From what source does it reach the box?

A. It is taken out from Tunnel No. 2 about 50 feet from the mouth of the tunnel, at the division box in the tunnel itself..

Q. Very well. You may give the series of measurements that you have, and the quantity of water flowing at that point,

and the dates.

A. The weir in that box is 40 inches in width. On January 5, 1902 the depth was .37 of a foot.

Q. The screen over the weir was 40 inches wide and .37 of a foot deep, is that the idea?

A. That is right.

Q. Proceed with the others?

A. January 21 the depth was .366 over the same weir.

Q. What year?

A. 1902.

Q. The same width?

A. The same width.

February 13, the same year, the depth was .365.

February 18, .364.

February 21, it was .373.

February 27, 4-1/2 inches in depth.

March 4, the depth was .364.

March 6, .365.

April 1, .35 of a foot in depth.

April 19, 5-1/32 inches in depth.

April 22, .376 of a foot in depth.

April 23, .378 of a foot in depth. That was at 9:20 in the morning. There was another measurement in the afternoon at 3:20 P. M. which was 5-1/4 inches in depth. I don't think there are any more measurements after that.

Q. Do you know anything about the pondage behind that weir at the time you made those measurements?

A. The 22 inch pipe which fed the box was full at that time and backed up nearly all the way to the tunnel, and the pondage was about four feet in width and six feet long.

It was quiet water and a very accurate measurement could be made there.

Q. On or about those same dates did you make measurements of the weir or the water at the weir at the mouth of the Eady tunnel which was delivered i to the pipe of the Tuolumne Water Company?

A. I made measurements on some of those dates; yes, sir.

Q. Let us have the advantage if you please of your data on that subject.

A. On December 14, 1901, the depth on the weir was .14 of a feet and the width 2.5 feet. That was a weir at the mouth of Tunnel 1 No. 2 and the conditions were very good for making an accurate measurement. On February 27, 1902, 12:30 P. M. .115 of a foot deep, width 2.5 feet.

April 1st, 1902, 7:40 A. M., depth on the same weir was ~~xx~~ .157 of a feet.

April 25, same year, 3:30 P. M. the depth was 4-3/4 inches and the width was 30 inches. The weir was shifted and the gate was shifted and at 3:38 P. M. it measured 3-3/4 inches in depth and 30 inches in width.

At 3:45 I measured the entire water which went the other way. There was 5-1/2 inches deep and 40 inches wide.

Mr. Chapman: You had measured the entire water that day?

A. That comprises all the water that comes out of Tunnel No. 2 on that date.

Q. And what did you make that?

A. 5-1/2 inches in depth, 40 inches wide.

May 11, Tunnel No. 2 weir, 5-1/16 inches in depth, 30 inches

in width.

Mr. Haskell: Q. Where is that weir located?

A. Tunnel No. 2 on the east side of the hills.

Q. How far is that located from the Ontario weir?

A. 3000 feet.

Mr. Britt: I will say for your information that this weir is the one that we have been calling Weir No. 1, at the mouth of the Eady Tunnel.

Mr. Chapman: And measures the water that goes to the Cucamonga Company, 5-1/2 inches in depth on a 30-inch weir?

A. That is right.

June 3, 1902, Cucamonga Weir at the mouth of the Eady Tunnel, 4-15/32 inches in depth, 30 inches long.

June 30, 9:40 A. M., Mouth of Tunnel, 5-3/8 in depth and 30 inches in width.

September 2, 1902, 1:35 P.M., depth on the weir 5-1/2 inches and 30 inches in width at Tunnel No. 2.

I think that is all I have that yearx for that place.

Q. On September 2 did you make any observations?

Mr. Chapman: He has just stated it. 5-1/2 inches over this weir.

Q. September 2 have you stated the result of any observations on that Ontario measuring box?

A. At 1:2[illegible] P. M. the water was flowing over the weir in such a way that I couldn't measure it; but I estimated that there was 300 inches going to Ontario.

Mr. Chapman: Q. Over the weir at the mouth of the tunnel?

A. No, sir; 3000 feet east of the tunnel. The water flowed in such a way that the pipe couldn't carry it all, and the

water raised above the weir. There was too much water for the pipe from that point west.

Q. Was there a weir by which the Ontario water could be measured at the mouth of the tunnel? Are there two weirs there?

A. Yes, sir.

Q. And one of the measurements you gave here, 6-1/2 inches over a forty-inch weir, that was at the mouth of Tunnel No. 2?

A. At that time it was 6-1/2 inches over a forty inch weir at the mouth of the tunnel.

Q. And back in April you gave us 5-1/2 inches over the 40-inch weir?

A. That is 3000 feet west of the mouth of the tunnel.

Q. And not over the weir in the tunnel?

A. No, sir; but over the Cucamonga weir in the tunnel at 3:30 it measured 4-3/4 inches.

Q. And after that on the same day, 3-3/4?

A. Yes, sir. It was turned in such a way that there was only 3-3/4 there.

Q. Both those measurements, 4-3/4 and 3-3/4 were over the 30-inch weir?

A. Yes, sir.

xxx And on the same day on the 40-inch weir it was 5-1/2 inches right at the weir and 3000 feet west I measured the Ontario water at the same place at 3:30, and it was 5-1/4 inches by 40; and I went past the Ontario weir going up to the tunnel, and I passed there at 3:30 and arrived at the tunnel at 3:30 and measured that water. Then I changed the

the gate and at 3:38 I measured that water again and then I went back to the Ontario weir and measured that one and it was 5-1/2 by 40. The water wouldn't have got there at that time, but there seems to have been a quarter of an inch in depth more than there was before.

Mr. Britt: Q. At the same point of time, did the water flowing over those two weirs--the one you call the Guamonga weir at the mouth of the Eady Tunnel or Tunnelx No.2, and the weir at the point 3000 feet west of where the water flowed to Ontario for the Antonio Water Company, did those two quantities of water flowing over those two weirs respectively embrace all the water of the Eady Tunnel?

A. Yes, sir; it was supposed to. There was a little bend at the watering trough, and that is all there comes out of that virtually.

Q. You are acquainted with what is called the Stowell well or sometimes referred to as Well No. 4?

A. Yes, sir; I have some acquaintance with that.

Q. It bears your patronymic?

A. It does.

Q. When was that well bored?

A. About 1896.

Q. Bored under your supervision?

A. Yes, sir.

Q. State whether it was an artesian well or not?

A: It was.

Q. And when you call it an artesian well what do you mean by that?

A. I call an artesian well one that the water rises in

above the ordinary surface of the water.

Q. Did that well flow at the surface of the ground?

A. It did. It flowed about ten feet above the surface.

Q. Was it piped to a point 10 feet above the surface?

A. It was.

Q. Did you keep measurements or did you take measurements of all of that water?

A. I did.

Q. What was the discharge in the well

A. I don't remember now. I think about 2 inches at the surface.

Q. Was that well at any time connected with the Bay Tunnel?

A. Yes, sir.

Q. When?

A. I think about two years after that.

Q. In what way was the connection made?

A. It was made by means of a six-inch pipe.

Q. A siphon.

A. Siphoned; and turned down something like 30 feet from the surface. There was a cut run into the well so it came out by gravity. I think the cut was about 8 feet deep. At that point it flowed about fifty inches of water.

Q. When was the tunnel connected at grade, if ever at all?

A. I think about the year 1900.

Q. Do you know what time in the year? Have you any figures or data?

A. I have no data here that I can tell you exactly.

Q. Is there any data which would enable you to tell whether

it was connected as early as February, 1900?

A. I couldn't fix the exact date.

Q. Anything to show the depth or hight of water from the surface of the ground in Feb uary 1900?

A. Yes; on Feb uary 18, 1900, 1896 well is 11.8 feet to water from the top of the curb.

Q. The curb was at the surface of the ground?

A. At the surface of the ground.

Q. You speak of 1896 well: That is another name, I suppose?

A. That is w at I called it in those days. I think it is called No. 4 on one of these c arts.

Q. The well called the "Stowell well"?

A. Yes, sir; that is the first well that I bored in that country.

Q. Then the wa er standing at 11 feet and a fraction be - low the top of the curb indicated what, with reference to any connection with the tunnel?

A. I can't tell w ether it was siphoned at that time or ran out by gravity at that depth or not. I have an idea that it was connected with the pipe that drew it off.

Q. Any connection at the grade of the tunnel?

A. Oh, no; there was no connection below t at.

Q. Any observation as to the hight of water in t at well at any other time?

A. On the 3rd of February I measu ed it at 4:20 P.M. and it was 12 feet to water.

Q. From what?

A. From the surface.

Q. At the Stowell Well, you are speaking of?

A. Yes, sir.

Q. If at that time there had been a direct connection between the water and the well, could the water -- and I am not asking for any opinion, but as a matter of observation,-- what would have been the hight of the water in the well?

A. After that tunnel was cut in-- that well-- cut into the tunnel, it never rose above the tunnel.

Q. Do you know at what depth below the surface of the ground the tunnel intercepted the well?

A. About 110 feet.

Q. State for what length of time after the water began to flow at the surface, which I think you said was 1896, it continued to flow to the top of the ground?

A. Until it was connected by siphon with the tunnel. I think it was about two years before-- I think it was in '96 when it was connected up.

Q. By what means?

A. By a pipe and siphon.

Q. The question is whether it continued during that time to flow at the surface of the ground.

A. I am satisfied it did.

Q. Do you know what the depth was of the water plane above which water rose in the well?

A. I think we got surface water at about 10 or 12 feet when the well was bored.

Q. Was the water continuous then all the way down? Or were there frequent intervals when there was no water?

A. It was wet all the way down. We couldn't tell. The water

would follow the pipe in doing the work..

Q. At the risk of repetition, I will ask you if you know when the grade connection was made with the tunnel and the well-- in what year?

A. I don't know; I don't remember.

Q. Was that well ever pumped, Mr. Stowell, by you or under your direction?

A. I don't think so.

Q. The Stowell well?

A. I don't think it was ever pumped.

Q. There is another well in the same vicinity called here well no. 14. Do you know where it is located?

A. I do. I located it.

Q. Do you know about what its distance is from the Stowell Well? But that is not important. We have the means of knowing exactly.

A. I could state it by looking it up, but it would take some little time.

Q. You say you located the well?

A. It was bored under my direction.

Mr. Chapman: You haven't finished. You haven't given the distance. Have you got it?

A. I haven't found it. It would take some little time to find it. I can give it approximately from the map.

Q. If you have the exact distance in your notes, I would rather you would take it.

A. It is about 400 feet from the scale.

Mr. Britt: Q. When did the boring of that well begin?

A. November, 1901.

Q. You know that to be correct?

A. I have a memorandum of it. From recollection I don't know the exact date.

Q. Can you give its rate of progress from time to time?

A. I have a memorandum here that on November 23rd they put in the anchors and started to drill. on the 29th. That was in November, 1901.. December 11 they were down 318 feet with a fifteen inch pipe, and then it was reduced to a twelve inch pipe. They smashed the starter at that point. On December 20 they were 440 feet in depth and a norther blew the rig down and they started up again on the 31st day of December. On January 9, 1902, they had finished down to 532 feet in depth.

Q. Was that the extreme depth of the well?

A. I can't say. That is the only memorandum I have

Q. What do you knowabout the volume of water which flowed from that well at that time?

A. There was no water ever flowed from that well over the surface.

Q. Do you know how the water rose in the well?

A. Yes, sir; the water rose in the well. I don't remember how much. Not very much. We struck surface water at about 35 or 40 feet and I don't think it ever rose more than 5 feet at any time in the well.

Q. Do you know anything about obtaining water by siphon or other means from the well during the time you controlled it?

A. We pumped it in the spring of 1902 to test thewell and to sink a shaft around the well, and I think I can find

some memorandums of it here somewhere. Sometime in the early part of March we started to pump that well and to sink a shaft.

Q. What year?

A. 1902.

Q. With what success and what effect?

A. I notice here that we set up the pump on the 4th of March. On March 12 I have a memorandum which says "pumping the well. Motor runs 740 revolutions; pump 720. Lowers the well 60 feet and pumps 90 inches of water.

Q. To what extent did it lower the water below the level at which it stood?

A. I believe it is about 35 feet to water. The next day "no juice. Well No. 14--

Mr. Chapman: Q. No what?

A. No electricity to pump with. On March 26 we installed another motor. March 30 pumping with a 20-horsepower and a 40 horsepower motor. Discharge five feet above the ground. It draws the water down 63 feet.

Q. Does that mean 63 feet of absolute lowering of the water level, or that much below the surface of the ground?

A. It lowered the water 23 feet. It was 40 feet to the water when not pumping and it lowered the water 23 feet, making 63 feet.

Mr. Chapman: Q. Does it show in what length of time it lowered it?

A. The pump was running day and night, right along continuously.

Q. You have only given the date of March 25.

A. I remember we were sinking the shaft and we ran day and night, the20 horsepower motor running 942 revolutions and the other at 743 revolutions, using 73.6 horsepower and pumping 166 inches of water.

Mr. Britt: Q. Do you know for what length of time that was run? You said it was for the purpose of sinking a shaft.

A. Yes, sir; it was run continuously night and day.

Q. What was the object of pumping thewell then?

A. To keep the water out of the way.

Q. Where were you sinking the shaft?

A. Right about the well. The well was pretty near in the center of the shaft; and the idea was to sink as low as we could and then tunnel across to another shaft near there that went into the tunnel-- the Eddy Tunnel-- and to lower the water across or siphon it across into the Eddy Tunnel. That was the scheme we were working at that time.

Q. What su cess did you make of it?

A. It was not completed when I got through with the job.

Q. What did you observe as to the quantity of water in the shaft?

A. We pumped as high as 215 or 220 inches. Af erwards, I notice a memorandum here, I changed the size of the pulleys and got better efficiency, and after that we pumped over 200 inches.

Q. What effect in lowering the water?

A. That is the only record I have of the depth; 63 feet.

Q. Did it lower it any beyond that?

A. I think so.

Q. How much?

A. Very little. It would stand about that point.

Q. You say that job was not completed when you gave up and abandoned it or quit it. How long afterwards did you see what they did to sink the shaft?

A. I wasn't in charge of the work after that time.

Q. Did you make any connection by siphon between that well and the Eudy Tunnel?

A. I dicnot.

Q. Or by any other means?

A. No.

Q. During the time that you were pumping that well did you make any note of the water in the well above Base Line, further north above Base Line,-- theSan Antonio Well No. 1?

A. No; I made no observations.

Q. When you were siphoning the Stowell well or piping it off did you make any note of the water in the wells that I have mentioned just now, San Antonio Well No. 1?

A. I made some observations there. I don't know whether it is Well No. 1 or what it was.

Q. Describe the well.

A. In '96 I found the height of the water in the Stowell well apparently influenced the level of the water in the shaft above Sixteenth Street.

Q. In what way?

A. When we drew the water down in the well the shaft was dry, comparatively. When we allowed the water to rise in the the Stowell well there was water in the bottom of the shaft in the Sixteenth Street well.

Q. Do you know when that Sixteenth Street well that you speak of was sunk?

A. I think it was sunk in about '94.

Q. What was the distance approximately between the Stowell well and this Sixteenth Street well that you have mentioned?

A. I should say it was about 2000 feet.

Q. Did you make that observation at more than one time?

A. Yes, sir.

Q. How often?

A. I think I was up there three times.

Q. Did you observe that when the water was down down in the Stowell well it was down in that shaft?

A. It was, about from 12 to 18 hours afterwards. After the change was made it would be noticeable in the shaft above.

Q. Did you notice at any time whether the water entirely disappeared in the shaft?

A. Well, it was comparatively dry digging. They were sinking the shaft at that time. That is how I happened to know about it.

Q. What was the depth of the shaft at that time?

A. 40 or 50 feet.

Mr. Chapman: Which shaft are you speaking of now?

A. The shaft sunk by Frankish & Stamm north of Sixteenth Street. I don't know anything about the number? It was the most easterly shaft of the two that I knew of above Sixteenth Street.

Mr. Britt: Could you point it out on this exhibit No. 1?

A. I couldn't locate it from the map. It was almost immediately north of the well No. 4.

Q. What you call the Stowell well?

A. Yes, sir.

Q. And about how far north of Base Line?

A. About 600 feet.

Q. Were there any other wells at that time north of the Base Line and about the distance that you have mentioned, other than this shaft that you speak of?

A. There were two shafts. One was further west than the one I speak of.

Q. It may not be located on that map at all.

A. I think it was about north of the dividing line between the Ontario and the Cucamonga Company's land.

Mr. Chapman: Q. Is that marked on Exhibit 1-- the division line between Cucamonga Company and what other company?

A. The Ontario lands and the Cucamonga Company's lands. The line running on the west of the tract is very nearly south of the well.

Q. West of what tract?

A. The Cucamonga tract-- between the Cucamonga tract and the Ontario lands.

Mr. Britt: Q. Why do you distinguish that particular hole in the ground as a shaft rather than a well?

A. The only thing visible from the top is a shaft. There is a well bored through the shaft and cut off at the bottom of the shaft. I don't think the other shaft west of there had any well in it. I think it was the only bored well north of Base Line within a thousand or two feet of Base Line at that time.

Q. In what year did you notice that influence between the Stowell well and the shaft? ~~of the~~

A. 1896, at the time the well was cut.

Q. Do you know about what time elapsed between the first of that series of three observations and the last?

A. I think it was several days apart.

Q. What amount of fluctuationx in the Stowell well was there at those times which had the effect that you have described, or at any rate, had the coincident effect that you described in the shaft north of Base Line?

A. We piped the '96 well up about ten feet above the surface of the ground which practically stopped the flow; and we also cut the well down about 8 or 10 feet below the surface, which made it flow fifty inches of water. There was 15 to 20 feet difference in the elevation of the water at the Stowell well.

Q. State whether or not you were changing the elevation of the water in the Stowell well on purpose in order to note that effect?

A. Yes; my attention was called to the fact that the water went out of the bottom of this shaft. That the men were working in the shaft as deep as they could work in water. And when we cut the well off ten feet from the surface the water disappeared there the next day. My curiosity was aroused and I experimented a little to see if I could find out if there was any connection between the two.

Q. On suggestion of Mr. Stevens, I inquire of you whether you cut the Stowell well about ten feet below the surface?

A. Yes, sir.

Q. And when that was done, in 12 or 18 hours you observed that the water had gone out of the shaft where the men were

at work on Sixteenth Street?

A. That was the idea.

Q. And after that aperture in the pipe was closed did any corresponding effect follow?

A. In a day or so the water was in the shaft above and it was wet digging again

Q. You didn't make any note or estimate of the flow of that well No. 14 at the level of the tunnel-- the Eady Tunnel?

A. Yes; I have had an idea about what it would flow.

Q. What was it?

A. Three to four hundred inches. That is the estimate I made of it.

Q. Do you know what depth the Eady Tunnel at that well below the surface of the ground was?

A. I should judge it was about 115 feet.

Mr. Chapman: Q. Are you talking about the same well now?

A. Well No. 14, he asked me about.

Mr. Haskell: I call your attention to Plaintiffs' Exhibit No. 1. There is a point here marked Well No. 14, which is at the northerly extremity of the Eady Tunnel as marked on this map. Is that the well you have referred to as well no. 14?

A. It is.

Q. And I also call your attention to a well marked Well No. 4, 1896, El. 1395. Is that the well you have referred to in your testimony as well No. 4 and also as the Stowell well?

A. It is.

Q. Do you know the property known as the Patricio Mariscano property, within the exterior boundaries of the Rancho Cucamonga, consisting of 80 acres?

A. I know the Mariscano place.

Q. How long have you been acquainted with that property?

A. Since about '87.

Q. Have you had anything to do with the use of the water on that property?

A. Yes, sir.

Q. Do you know how much water has been used on that property and in connection with it?

A. I think it has been rented with eight inches of water.

Q. Have you ever leased that property yourself?

A. I had it from Marsicano for a number of years.

Q. What did you do with the water and the land?

A. I let it to a Chinaman.

Q. What was grown on it?

A. Strawberries and vegetables.

Q. And was that water used on the place for growing vegetables and strawberries?

A. Entirely.

Q. During what period of time was that and when was that so used to your knowledge?

A. I think I had it for six or seven years.

Q. And when did your lease expire?

A. I think it has got one or two years to run yet.

Q. You are still so using it?

A. Yes, sir.

Q. From what source does that water come?

A. It comes from the Red Mill

Q. From the Cucamonga Springs?

A. Some of it.

Q. Through what pipe lines is that conveyed?

A. Of theCucamonga Water Company.

Q. Through what pipe linesis the water conveyed to the Matthew Turner property and his associates?

A. The lines of the Cucamonga Water Co.

Q. George D. Haven?

A. The same.

Q. Do you know the Musselman property, consisting of 20 acres, within the exterior boundaries of the Rancho Cucamonga, now owned by George D. Haven?

A. I don't think it is in the rancho Cucamonga, but I know the property.

Q. Through what pipe lines was that water conveyed?

A. CucamongaWater Company.

Q. And the Cucamonga acted in a carrying capacity and delivered the water to them as the owners of the water?

Mr. Chapman: Objected to as incompetent.

The Court: Sustained.

Q. Have you ever acted in any capacity as an officer of the Cucamonga Water Company?

A. I have; as president, for a good many years, for the company.

Q. How many years? A. I should judge eight years.

Q. During that time didyou have charge of delivering the water to the persons I have named, or did your company?

A. The company delivered water to Turner and to Mussel-

man. I don't think they ever delivered any to Marsicano.

Q. Didn't it go through their pipe line?

A. There was water used on the place that went through the pipe lines, but I don't believe they ever delivered any to Marsicano.

Q. But it was delivered on the place, was it not?

A. Oh, yes.

Q. And the same with Haven, was it not?

A. It was delivered at a certain point; yes, sir.

Q. And that delivery was made by your company for them?

A. Our zanjero delivered it.

Q. And you charged them for the service of delivery?

Mr. Gregg: Objected to as leading.

A. We charged it, but they never paid it.

Q. And the company recognized them as the owners of the water, did it not?

Mr. Chapman: Objected to as leading and incompetent.

The Court: Sustained. Intervenor excepts.

Mr. Britt: Q. I desire to direct your attention here for a few moments to some entries contained in plaintiffs' exhibit 32, in which N. T. Stowell is mentioned as observer. Have you any record of an observation or measurement of water made by you September 19, 1901, of the water from the "Y" Tunnel and cienega?

A. What is the amount?

A. 30.70 inches.

A. Yes, sir.

Q. What is that measurement, Mr. Stowell?

A. I checked over the measurements on the blue print and

I found them correct..

Q. What measurement have you of September 19, 1901, 30 and a fraction inches of water-- 30.70?

A. I checked all those measurements over.

Q. On this exhibit 32. Let me call your attention to this date to which your attention was directed.

A. That is the "Y" Tunnel and cienega?

Q. Yes.

A. That is correct.

Q. You made that measurement?

A. Yes, sir.

Q. And found that amount of water?

A. Yes, sir.

Q. I now ask your attention to another entry of April 1, 1899-- several measurements.

A. Under the first column, Creek Division Box, 107.25; 16-inch, 98.20.

Q. 16-inch pipe line?

A. Yes, sir; the second column.

Q. Making a total of --

A. 205.45.

Q. November 11, 1901. N. W. Stowell measured at Creek Division Box, 46 inches. Do you know anything about that?

A. I don't find it.

Q. There appear here some measurements made by you the same date on the west side, 32.12, at Cucamonga well, as you call it, and marked here as well no. 1, on November 11 1901, and some 116 inches of water of the San Antonio Water Company.

A. I don't find any memorandum of it.

A. Well, all right. I will not stop to have you run your data down now, but I may want you to do so later. I will inquire of you whether you have ever observed the nature of the material in the ground on the surface and below the surface by means of wells or borings of any kind, whether by yourself or other persons, in the territory between the Cucamonga Springs and thence up toward the mountain and the mouth of Cucamonga Canyon?

A. I have observed it.

Q. What is the nature there, speaking generally, of the material on the surface of the ground beneath the surface also, as you have observed , from borings and excavations?

A. After leaving the Red Hills the surface is nearly all covered with gravel and boulders. The wells and shafts dug through it show thestrata to be alternate clay and gravel and boulders, without any regularity.of formation. It is very irregular.

Q. What do you mean by that?

A. That there is no regular stratification.

Q. No continuity of thestrata?

A. No, sir.

Q. Were there no stratas of clay that you passed through in your borings?

A. I haven't any records here. I have records of all those wells. There were some strata of clay that were 40 feet thick, and other places it would be very thin-- a foot or a few inches, and some of them 10 feet. As a general thing, most of the wells were about two-thirds gravel and

boulders and one-third clay; but no two of them corresponded at the same depth or the same thickness. It would be impossible by boring one well to judge what kind of strata you would strike in another well.

Q. How many wells have you put down in that vicinity?

A. I suppose of wells and shafts, 20 or 25.

Q. And you had an opportunity to know all the wells?

A. Yes, sir; practically all the wells bored in that country, the work as it progressed.

Q. State whether or not there was any similarity between the formations of those various wells that you speak of?

A. They were similar in their dissimilarity.

Q. What was the genral nature of the material?

A. The nature of the material and the stratification were very irregular, so that you couldn't tell from one well what you would strike in the next one, even close by.

The Court: Q. How did the clay that you speak of finding in the wells compare with the material found on the surface of the RedHill?

A. It was the same thing. On the 90-acre tract we struck earth and a similar formation that the surface is on top of the Red Hill. That is, in the tunnel. We found the remains of brush roots and gopher holes and squirrel holes at 80 feet below the surface, showing that at one time it was the surface of the earth at that point. Above it would be wash gravel and above that other stratifications of clay and sedimentary deposits.

Q. State whether or not in all the wells you found some fomations of sand and gravel and clay and boulders?

A. Yes, sir.

Mr. Haskell: Q. Did the gravel that you found coming from those wells show any evidence of having been worn smooth?

A. Some of it was smooth wash gravel and some of it was very sharp. It varied in that respect. Some of the boulders were smooth wash gravek and boulders that it was almost impossible to get through. It was very hard.

Mr. Britt: Q. What character of stone?

A. Granite.

The Court: How large were the largest boulders that you encountered?

A. In the '96 well, we bored to about 30 feet in depth and struck a bed of boulders and had to dig a shaft to get them out. Some of them would weigh a ton, and very hard and flinty.

Q. Were these washed round?

A. Wash boulders, smooth and hard.

Q. How did that experience compare with the other wells?

A. The '96 well we had the most difficulty with on account of the hardness of the material. It is possible, though, that we were using inferior tools at that time to what we were using afterwards, and the tools may have had something to do with the difficulty.

Mr. Haskell: Q. Is well no. 14 perforated?

A. Yes, sir.

Q. From what distance?

A. I couldn't tell that without the record.

Cross Examination.

Mr. Chapman: Q. At what depth below the surface did you strike water in the '96 or Stowell well?

A. About twlve feet, if I remember right.

Q. Was the water then continuous from there down to the bottom?

A. I think so. We couldn't tell because the water would follow down wherever we dig.

Q. As well as you could determine it was continuous?

A. At 30 or 40 feet down we had to sink a shaft to get through, and after that we encountered clay which was comparatively easy working; but on top of that clay we found ~~x xxxix~~ an immense nest of boulders which was very difficult to get through.

Q. And at what depth did you strike that pile?

A. Between 30 and 40 feet.

Q. How thick was the stratum of clay?

A. I don't remember. It was quite a thick strata. There is a record of it here in the court that you could find out.

Q. In the McPherson case?

A. Yes, sir.

Q. Can you locate on plaintiffs exhibit 1 the Stowell well and well no. 4 and the '96 well, which are several names that the well is known by?

A. It is located at the angle of the tunnel and marked elevation 1396.

Q. What designation is given to the well?

A 1896.

Q. And elevation 1396? A. Yes, sir.

Q. Do you know whether that marks the elevation of the water where you originally struck it or the surface of the ground?

A. The elevation of thesurface, I believe. According to the contour it is the elevation of the surface.

Q. Could you tell when you were going through this stratum of clay whether there was any water in the clay to amount to anything?

A. I couldn't tell.

Q. What time was it that you cut down this well first?

A. I don't remember the date.

Q. Do you remember the year?

A. '9 .

Q. Have you any memorandum here by which you can show when you commenced to sink that well?

A. I have not.

Q. Do you remember at what time of the year it was that your attention was called by the owners of the well above the Base Line-- the Sixteenth Street well-- as to the supposed effects of the cutting of your well ~~and~~ on the shaft there?

A. I don't remember the date.

Q. Do you know how deep water was in the shaft before you cut the No. 4 well?

A. I think it was about 40 feet, the depth of the shaft.

Q. How deep was the water in the shaft?

A. That I don't know. I don't think at the time the well was bored that the shaft was down to water.

Q. At the time your well was bored?

A. At the time the '96 well was bored I don't think the shaft at that time reached quite to water.

Q. And you know how deep the water was there in the shaft exactly or approximately at the time you cut the Stowell well the first time?

A. As I remember it they were sinking at the time.

Q. Sinking the shaft?

A. Sinking theshaft at that time, and at about the time we were cutting the well they had sunk down so that they got a little water in the bottom of the shaft.

Q. And you cut the Stowell well about ten feet below the surface of the water?

A. Below the surface of the ground.

Q. What depth did you say you struck water?

A. About the same depth. 10 or 12 feet, if I remember right.

Q. How deep had you sunk the well when the water rose up to the surface?

A. I don't remember.

Q. You say you had a pipe about ten feet above the surface.

A. Yes.

Q. And thewater rose up to the top of that pipe?

A. Yes, sir.

Q. Was t at after you had completed the well?

A. Yes, sir.

Q. How deep was it when you completed it?

A. I have forgotten.

Q. Do you remember how near to the top of the ground the water was when you cut the well 10 feet below the surface?

A. Flowing over the top.

Q. When you cut it then was it just barely flowing over the top?

A. My impression is that it flowed about 20 or 25 inches over the top at the surface.

Q. When you cut it at the depth of 10 feet do you know how much you increased the flow?

A. About d-ubled it.

Q. You were then taking about 40 or 50 inches?

A. About 50 inches.

Q. Then how long was it before the effect in the shaft was observed?

A. The boys that were working in the shaft came down next morning and said that the water dropped out of the shaft, and wanted to know what we were doing, and I showed them what we had done.

Q. But you don't know how much the water subsided in that shaft in order to get out of the shaft entirely?

A. No, sir.

Q. It might not have been over two inches?

A. No, sir. Probably not.

Q. After that, you say, you experimented with well no. 4 for the purpose of determining to your satisfaction whether there was any influence exerted between these two wells. Do you know about how long after the first observation it was before you made any changes in your observation for the purpose of seeing what influence it would have on the shaft?

A. I think it was within a day or two after that that we put the pipe on again.

Q. And then the effect was--

A. To make the water rise in the shaftx above next day.

Q. And in the mean time they were working on the shaft?

A. Yes, sir.

Q. You don't know whether they had lowered the shaft?

A. No, sir.

Q. Then how long was it before you next experimented?

A. As soon as I went up and found that they were shoveling out mud I opened the well below again, to let the thing dry out.

Q. How long was it before you discovered it?

A. As I recollect, it was every day. That is, if I went up and found that they were shoveling, I immediately turned the water loose and the next day I went up and found it dry. There might have been another day between, but nearly every day.

Q. All ofthese experiments were within a few days?

A. Yes, sir.

Q. Probably five or six?

A. Probably within a week.

Q. When did you next cut this Stowell well or '96 well lower than the 10 feet?

A. I think it was about four years after.

Q. That would bring it down to about 1900, sometime?

A. Yes, sir; somewhere about that.

Q. And then how far below the surface of the ground did you cut it?

A. It was cut in the tunnel when it was cut at all.

Q. You did't make another cut in that tunnel?

A. No, sir.

Q. And the tunnel was about how far below?

A. Something like 100 feet or a little more, probably.

Q. I believe you stated that that well that you have referred to above the Base Line upon which these experiments were made was dug in '94?

A. I think it was dug at or before that time.

Q. Do you remember whether it was three or four years before?

A. I had no occasion to note it, so I don't remember when it was. It was the Frankish & Stamm well.

Q. There was a well bored there?

A. There was a well bored in the bottom of the shaft.

Q. How deep was the shaft?

A. About forty feet.

Q. When is the last time you saw that?

A. Six or seven years ago.

Q. Was it in use then?

A. Yes; there was a pumping plant on it the last time I saw it.

Q. How was it with the other wells? Did you ever observe the effect on any other well above the Base Line than that one?

A. No; that is the only one that I ever paid any attention to.

Q. You think that was the one that was first put down by Stamm?

A. I think it is the only one that they had ~~for a xxxxx~~

with a well in the bottom of it

Q. Of that string of wells above Base Line it was the first one constructed or put down?

A. I don't know.

Q. Who was it? Stamm and--

A. Frankish.

Q. Did they put down more than one well?

A. They put down two shafts right near there, but I think there was only one well bored in the bottom of a shaft.

Q The other is a dug well?

A. Yes, sir; a dug shaft.

Q. Do you know which is the first that was put down?

A. No; I do not.

Q. Did you afterwards make any observations as to the effect upon these wells above Base Line, of the operations of the Stowell well?

A. I never did.

Q. When you last saw the well above Base Line did you measure the distance to the surface of the water from the surface of the ground?

A. If I remember right there was a pumping plant there and there was no chance to measure.

Q. And was the pump in operation?

A. Yes, sir.

Q. You never did make any such measurements?

A. I have measured the water there a number of times coming from the well.

Q. Where is that taken?

A. To Ontario.

Q. Does it go through this-- does any of the water of the

wells go through thewair or measuring box 3000 feet west of theEady Tunnel?

A. Nothing north ofBase Line goes through that tunnel.

Q. What are the waters that come through that measuring box west of the Eady Tunnel?

A. The waters come off of section 4 and 5 and south of Base Line and north of the San Bernardino road.

Q. Any water which comes from the Eady Tunnel and the wells with which it is connected?

A. No.

Q. Do you know of the sinking of well no. 14?

A. Yes, sir.

Q. Did you see the material that was brought up in the operation of sinking that well?

A. Yes, sir.

Q. How did it compare with that in the St well well?

A. The same general character.

Q. The same general character; but how was it with respect to boulders? Were the boulders a s large or as numerous?

A. I don't think the boulders were so bad close to the surface as they were in the '96well. But it is difficult to tell. They had a very powerful set of tools and they didn't mind much about boulders so much as we did with the light tools that we had in the '96 well.

Q. And you can't tell what the comparison was between them in that respect?

A. No, sir.

Q. How about the clay?

A. It was about the same average formation; a strata of

clay and a strata of gravel.

Q. Did you determine anything about the clay material that came from well 14, whether that clay stratum or mass, whichever it might be, was permeated with water?

A. It was without water.

Q. Clay without intermixture of sand or other material is generally impervious? What was the fact? Was it pure clay or a conglomerate?

A. There is no pure clay that I have ever found in any well. There is enough clay mixed with sand to make it tough and make a ball, but not pure clay.

Q. From your eye and knowledge of the country, how is the representation of the Red Hills both on the west and east on this map, compared with what they are actually on the ground?

A. A very good representation.

Q. Do you know whether there was any wells sunk on those hills?

A Yes, sir.

Q. Where?

A. In the upper part of the 90-acre tract.

Q. How far from the north boudary of the 90-acre tract?

A. I think it is shown on this map at this point, about 250 feet from the northeast corner of the 90-acre tract.

Q. That well that is represented there is just outside or aside from the hatches which represent this hill, isn't it?

A. The bluff of the hill is nearly the western boundary of the 90-acre tract.

Q. By the contour lines would that leave the well that you have pointed out here-- what is it?

A. Well No. 1, I think.

Q. Elevation 1407.

A. Well no. 1 and no. 2 are the two highest wells on the tract.

Q. Neither of them is within those marks representing mountains?

A. Yes, sir; both of them are on the mesa and the red hill.

Mr. Britt: If you will allow the suggestion, Judge Chapman, the hatches represent the cienega, rather than the hill.

A. The hill land is right here.

Q. What do you mean by the bluff?

A. There is a 20 foot difference in elevation at the point on the east side of the tunnel and the point right over there. This is the bluff for a mile following from the southeast corner of the 90-acre tract, almost diagonally to the northwest corner; that is the line of the bluff.

Q. Now thewell that you pointed out first isn't anywhere near the bluff of the hill?

A. It is up on the hill.

Q. What do you mean by the bluff along this line?

A. The hill is on that side; a very abrupt bluff.

Q. All ofit above the tract which is east?

A. All of it above the tract just west.

Q. And how about the east?

A. On the east there is a ridge that is alittle higher than it is at well no. 1.

Q. Is it higher than this bluff?

A. Yes. The highest contour line shows 1460 feet, which is 50 feet higher than well no. 2.

Q. Where is that 1460 feet contour? What is the one just to the west of it?

A. 10 feet less.

Q. 1450?

A. Yes, sir; There is a raised map of that territory in the court, if you wish to see it.

Q. You made it, did you not?

A. Yes, sir.

Q. That was used in the McPherson case?

A. Yes, sir.

Q. Did you see the material that came from that well no. 2?

A. No, sir.

Q. What was the well numbered?

A. 1. No. 1 is east of No. 2.

Q. What is the one that is west?

A No. 1.

Q. No. 1 is east of No. 2?

A. No. 1 is on the east line of the 90-acre tract and no. 2 is about 500 feet of no. 1-- no, about 400 feet west of No. 1.

Q. You have stated that you were a witness in the McPherson case.

A. Yes, sir.

Q. And testified in 1900?

A. Yes, sir.

Q. Do you remember that when you were examined in that case that you were asked the following questions, and gave the following answers:

"Now you have heard the testimony as to a conversation with Mr. Armitage as to the effect of the pumping of that well on the flow of the water from the wells known as the Stowell wells. What have you to say as to that conversation?

"A. I think he stated the conversation quite correctly. We were joking about the water and I was really ridiculing the proposition that any water pumped out of one of the numerous wells north of Base Line would affect the others below, especially as the amount being pumped was only from about 11 to 14 inches. At the same time, I had no objection to his jumping on the San Antonio Water Company if he felt like it.

"Q. Did you tell Mr. Armitage in that conversation that you had noticed the effects of pumping the Sixteenth Street wells on the Stowell wells within 10 or 12 hours?

"A. I don't think I made any such statements on that because there were no facts to justify it. There was no possibility to measure the amount of water at that time or any previous time or ~~any time previous~~ ~~in~~ a long time previous as to how much was coming from those wells as they were discharged in the tunnel." Did you so testify?

A. Yes, sir.

Q. Were you at that time having reference to the same Stowell wells and the wells north of the Base Line of which you have been speaking this afternoon?

A. The well that I spoke of north of Base Line is one of

4the

the series that was there when that testimony was given.

Q. And at that time when your testimony was given there had been nothing to indicate that the pumping of the Sixteenth Street well would have any effect on theStowell wells?

A. No, sir.

Q. Was there any observed influence at all between that series of wells and the Stowell wells other than what you have testified to this afternoon?

A. No, sir. As I said then, it was impossible for such a small amount of water as that-- it would be impossible to detect it in several hundred inches down below.

Q. And as a matter of fact at that time there weren't any facts open to you to justify the supposition that the pumping of the Sixteenth Street wells would have an effect on the Stowell wells??

A. I was asked as to the facts; not my opinion. I had no facts. My opinion was not asked xx xbx xx of me.

Q. But you were ridiculing the idea that any such effect would come?

Q. And I still say that the pumping of 11 inches, you couldn't account for it below, because the daily fluctuations on that water discharged is more than that amount.

Q. I will call your attention to another question and answer that follows immediately that which I have read: "Q. Had you ascertained in any manner whether the pumping of that well did affect the Stowell well? A. No, sir." Thxx

A. That is true.

Q. I believe I asked you if you had any memoranda from which

you could determine when that Stamm & Frankish well that you referred to was sunk?

A. No.

Q. It was in '96 that you had these conversations with the men that were working in the shaft?

A. Yes; I think it was '96.

Q. That is the year in which you were sinking the Stowell well?

A. Yes, sir.

Q. Was the Stowell well completed that same year and finished as far as the well boring was concerned?

A. Yes.

Q. Do you remember who were the men that were working in that shaft at that time?

A. I couldn't tell their names. I don't know that I even have a memorandum of them. I think I could find out, if you wish to know very bad.

Q. I wouldlike to know.

A. I presume the San Antonio Water Company can give you the names.

Q. If you could give us the exact date they doubtless could.

A. I think I could find the date. It was the first sinking done by the San Antonio Water Company on those shafts.

Q. The entire depth of the shaft you think was about forty feet?

A. It was at that time about forty feet.

Q. And how much was it lowered?

A. I think they lowered it about twenty feet.

Q. So it was about 60 feet in depth?

A. Yes, sir; I think so.

Q. In 1902 when you were making these observations on the weirs at the Division Box and the 30 inch pipe and other places, what object had you in view?

A. It was a matter of habit with me more than anything else.

Q. Had you parted with your interest in that section of the country at that time?

A. I had.

Q. When you were superintending or observing the sinking of well no. 14 did you still have any interest in that country?

A. I had very little interest.

Q. You still had some?

A. Yes, sir.

Q. Are you still interested in the Cucamonga Water Company?

A. No, sir.

Q. When did you cease to be a director in that company?

A. 1902, if I remember right.

Q. It was in 1902 that you were making these observations?

A. Yes.

Q. Were you a director then?

A. I think some of the time, yes. I think I resigned during the summer.

Q. Were you a director in the Cucamonga Fruit Land Company at that time?

A. Yes, sir.

Q. Was that well begun before or after the Cucamonga Fruit

Land Company had conveyed its interest to the Ontario Company?

A. It was begun and finished, if I remember right, before they transferred. I think the transfer was made in April, although it was agreed to be conveyed some little time before that.

Q. And the well was finished about when-- well no. 14?

A. I think I gave you the date a few minutes ago.

Q. If you gave it it is not necessary to repeat it. We will have the evidence to-morrow morning. Did the Cucamonga Fruit Land Company make connection between the tunnel and well no. 14 before it transferred its interest?

A. No, sir.

Q. Had it begun to make it?

A. No, sir.

Q. How near was the tunnel to Well No. 14 at the time of the transfer?

A. About 40 feet, if I remember right.

Q. Up to that distance within 40 feet of the well the work was done by the Cucamonga Fruit Land Company, was it not?

A. Yes, sir.

Q. How long had that company been at work on that tunnel at that time?

A. Since '95.

Q. That was in 1902?

A. Yes, sir.

Q. The Stowell well had been siphoned into ~~xxxx xxx x~~ Tunnel No. 2 before the transfer to the Power Company?

A. Yes.

Q. Had the tunnel reached well no. 4 or the Stowell well before that transfer ?

A. Yes, sir.

Q. So that the waters of that well were flowing into the tunnel on the grade of the tunnel?

A. Practically; yes.

Q. About how much water was flowing?

A. I don't remember.

Q. In the measurements that you made in 1902 I have observed that you made measurements on the same day sometimes in different places, and at other times the measurements were not on the same day. Do you know why that was?

A. Sometimes I never went on the east side at all.

Q. On January 5, 1902, you measured the water at the "Y" Tunnel.

A. That is right.

Q. On the same date you measured at the point of Division between the Old Settlers and somebody?

A. Yes, sir.

Q. Who were the persons that got the other part of that water?

A. The Cucamonga Water Company.

Q. And the division dam was so arranged--

A. It was automatic.

Q. -- that when the Old Settlers got 35.64 inches of water then, if there was more, it would flow over into another pipe line?

A. Yes, sir.

Q. That was the Cucamonga Water Company's?

A. Yes, sir.

Q. And conducted the water where?

A. To the reservoir in section 3.

Q. And there to what places was it distributed?

A. To all the settlers south of the reservoir.

Q. Inside of the Cucamonga Ranch?

A. Some inside and some outside.

Q. On January 5 you measured also at the weir 3000 feet west of the Eady Tunnel?.

A. That is the first weir I measured that day.

Q. You had no motive for that except that of curiosity?

A. At that time I was president of the Water Company.

Q. The Cucamonga Water Company?

A. Yes, sir; and I was in charge of the affairs of the Fruit Land Company. It was my business to look after the water at that time.

Q. That was the reason that you were doing it?

A. Yes, sir; that is why I was doing it.

Here the Court takes a recess until to-morrow, January 23, 1908, at ten o'clock A. M.

----oOo----

Defendant.

IN THE

Superior Court

OF THE

County of San Bernardino

State of California

Cucamonga Vineyard Co., Plaintiff	)	
vs.		Vol. XIII.
San Antonio Water Co., Defendant	)	

INDEX.

I. BENJAMIN, Official Reporter

January 23, 1906. Thirteenth Day.

Mr. Waters: Plaintiff Old Settlers Water Company offers in evidence the following deeds:

Mrs. L. M. Nichols and A. L. Miller to Old Settlers Water Company. Dated December 8, 1902, recorded January 7, 1903, in Book 324 of Deeds, page 245.

Conveys water rights appurtenant to certain tracts of land in Cucamonga. Exhibit 40.

T. L. Hall and wife to Old Settlers Water Company.
Dated, December 27, 1902.
Recorded in Book 327 of Deeds, page 11.
Conveys certain water rights appurtenant to lands in Cucamonga. Exhibit 41.

Deed from T. L. Kilbourne and Alice E. Kilbourne, his wife, to Old Settlers Water Company.
Dated January 5, 1903.
Recorded January 7, 1903, Book 327 of Deeds, page 14.
Conveys certain water rights appurtenant to certain lands at Cucamonga. Exhibit 42.

John W. Moore and Mary J. Moore, to Old Settlers Water Company.
Dated December 2, 1902.
Recorded Jan. 7, 1903, Book 327 of Deeds, page 18.
Conveys certain water rights appurtenant to certain lands at Cucamonga. Exhibit 43.

Mary M. Keller, formerly Mary M. Cunning, to Old Settlers Water Company.

Dated November 25, 1902.

Recorded January 7, 1903, Book 327, Deeds, page 19.

Conveys certain water rights appurtenant to certain lands at Cucamonga. Exhibit 44.

Francis G. Smith and Annie, his wife, to Old Settlers Water Company.

Dated December 1, 1902.

Recorded Jan. 3, 1903, Book 327 Deeds, page 31.

Conveys certain water rights appurtenant to certain lands in Cucamonga. Exhibit 45.

John W. Moore and Mary J. Moore to the Old Settlers Water Co.

Dated Dec. 2nd, 1902.

Recorded Jan. 7, 1903, Book 327, Deeds, page 23.

Conveys certain water rights appurtenant to certain lands in Cucamonga. Exhibit 46.

W. H. Denham and Grace Denham, his wife, to Old Settlers Water Company.

Dated December 27, 1902.

Recorded Jan. 7, '03, in Book 327 of Deeds, page 31.

Conveys certain water rights appurtenant to certain lands in Cucamonga. Exhibit 47.

Kate M. Feron and Thomas Feron to Old Settlers Water Company.
Dated June 3, 1904.
Recorded June 20, 1904, in Book 349, Deeds, page 168.
Conveys certain water rights appurtenant to certain lands in Cucamonga. Exhibit 48.

E. L Davenport and wife to Old Settlers Water Company.
Dated December 30, 1902.
Recorded Jan. 7, '03, in Book 327 of Deeds, page 12.
Conveys certain water rights appurtenant to certain lands in Cucamonga. Exhibit 49.

John Maddock and wife to Old Settlers Water Company.
Dated December 3, 1902,
Recorded Jan. 7, '03, in Book 327 of Deeds, page 24.
Conveys certain water rights appurtenant to certain lands in Cucamonga. Exhibit 50.

E. P. Norwood and wife to Old Settlers Water Company.
Dated December 1, 1902.
Recorded Jan. 7, '03, in Book 327 of Deeds, page 17.
Conveys certain water rights appurtenant to certain lands in Cucamonga. Exhibit 51.

Elizabeth Smith to Old Settlers Water Company.
Dated December 30, 1902.
Recorded Jan. 7, '03, in Book 327 of Deeds, page 13.
Conveys certain water rights appurtenant to certain lands in Cucamonga. Exhibit 52.

S. P. Kincaid and wife to Old Settlers Water Company.
Dated December 2, 1902.
Recorded Jan. 7, '03, in Book 327 of Deeds, page 20.
Conveys certain water rights appurtenant to certain lands in Cucamonga. Exhibit 53.

Sarah A. Manchester to Old Settlers Water Company.
Dated December 9, 1902.
Recorded Jan.7, '03, Book 327 of Deeds, page 13.
Exhibit 54.

A. Stinchfield to Old Settlers Water Company.
Dated December 1, 1902.
Recorded Jan.7,'03, in Book 327 of Deeds, page 6.
Conveys certain water rights appurtenant to certain lands in Cucamonga. Exhibit 55.

Alice P. Southworth to Old Settlers Water Company.
Dated December 3, 1902.
Recorded Jan.7,'03, in Book 327 of Deeds, page 23.
Conveys certain water rights appurtenant to certain lands in Cucamonga. Exhibit 56.

Martha J. Kincaid to Old Settlers Water Company.
Dated December 2, 1902.
Recorded Jan.7, '03, in Book 327 of Deeds, page 10.
Conveys certain water rights appurtenant to certain lands in Cucamonga. Exhibit 57.

Jennie P. and W. J. Hincaid to Old Settlers Water Company.

Dated December 23, 1902.

Recorded Jan. 7, 1903, in Book 327 of Deeds page 22.

Conveys certain water rights appurtenant to certain lands in Cucamonga. Exhibit 58.

W. T. Ashley and Emma T. Ashley, Oscar Wilkins and Mary L. Wilkins, to Old Settlers Water Company.

Dated March 24, 1905.

Recorded Feb 6, 1906, in Book 370 of Deeds, page 4.

Conveys certain water rights appurtenant to certain lands in Cucamonga. Exhibit 59.

All the records referred to here being records in the Recorder's office of the County of San Bernardino, State of California.

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Plaintiffs make application to the Court for leave to amend the complaint. Plaintiffs' counsel are instructed by the Court to prepare their amendment and submit the same before two o'clock.

The Court takes a recess until two o'clock P. M.

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AF ERNOON SESSION:

Plaintiffs' counsel present their proposed amendment, and ask leave to file the same.

Mr. Chapman: We object to the filing of this complaint--amendment to the complaint in this case for these reasons. This morning when counsel proposed to amend it was proposed to bring in new parties essential for a final and complete determination of the controversy. This amendment does nothing of the kind and there is no excuse at the present time for the amendment except as an amendment to the complaint against the San Antonio Company, and the only amendment is to bring in the tunnel and wells number 14 and number 4 within the scope of the complaint of plaintiff that has been before this court for more than three years. There is no reason whatever shown for the amendment.

(Discussion.)

The Court: overrules the objection and permits the proposed amendment to be filed. Defendant excepts.

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N. S. STOWELL.

N. S. STOWELL, heretofore sworn and examined, being recalled for the resumption of his cross examination, testified as follows:

Cross Examination.

Mr. Chapman: Q. At the time you were making the measurements to which you testified yesterday, in the latter part of 1901, and more particularly in the year 1902, did you give us all the measurements that you made of all the wells and

waters that were flowing in that district of the Cucamonga Springs?

A. No, sir.

Q. Did you make any measurements of the amount of the flow at the same time from the Lone Star Tunnel and the Lone Star wells?

A. I presume I made some during those times.

Q. Have you not those with you?

A. Yes, sir.

Q. Will you produce them?

A. What date do you wish?

Q. You say, if I remember right, with some time in December, 1901. You were acquainted with the Lone Star tunnels, were you not, and the Lone Star wells?

Q. Yes, sir; I constructed a good part of them.

Q. And when did you construct them?

A. I think '97 and '98.

Q. Did you refer to tunnels or the wells or both?

A. Both.

Q. How many of those tunnels were there?

A. One main tunnel.

Q. And some adjunct to the tunnel?

A. Well, there may be some short branches.

Q. Was it all constructed in '97 or '98?

A. The original tunnel was constructed in 1899, I think.

Q. The original Lone Star tunnel?

A. Yes.

Q. What work was done on it in '97 or '98?

A. It was cleaned out, re-timbered and extended up to some wells that were bored in '97.

Q. How many wells?

A. Two wells.

Q. And they are known as the Lone Star Wells?

A. Yes, sir.

Q. Were pumping plants erected on these?

A. Yes, sir.

Q. When?

A. I think in '99.

Q. And did they begin pumping?

A. Yes, sir.

Q. What was done with the water taken from the Lone Star wells and tunnels?

A. That was conveyed in the pipe lines to the northeast corner of Lot 3, section 3, and connected with the Cucamonga Water Company's pipe system at that point.

Q. And who conducted it from the Lone Star tunnels and wells to that point?

A. The Cucamonga Fruit Land Company.

Q. Did that company construct those tunnels and wells?

A. Yes, sir.

Q. Does it own them yet?

A. It belongs to the Cucamonga Water Company.

Q. When did they acquire it?

A. In 1902.

Q. What was done with the waters from that tunnel? Where were they used?

A. On sections 1, 2 and 3, and the section south of that.

Q. You still have reference to township 1 south and 7 west?

A. Yes, sir.

Q. And neither section 1 or 2 was within the Cucamonga Rancho-- Section 1 wasn't?

A. No, sir.

Q. And the east half of section 2 was not?

A. No, sir.

Q. What was the other section?

A. The sections immediately south of those sections.

Q. And all of those which lie east of the center of section 1, 11 and 24, lie outside of the Rancho line?

A. Yes, sir; I believe so. And covering the land inside of the Cucamonga Rancho up to the Vineyard Company's land.

Q. Now these pumps were erected when?

A. 1898.

Q. And did they commence pumping then?

A. Yes, sir.

Q. Were those waters used continually from that time up to '98 in the irrigating season, down to as far as you knew anything about it?

A. Yes, sir.

Q. What were the measurements of the amounts of water taken from this Lone Star Tunnel and Wells?

A. I have no measurements of those dates. From 40 to 50 inches was the amount received from them when we first put them in-- the pumping plants on the wells.

Q. Have you got the exact amount?

A. I think I could get it off of a chart in the other case.

Q. Do you remember now about when the tunnels were first put in?in '89?

A. No; '97 and '8.

Q. Can you give us the greatest amount that was obtained from that tunnel and wells?

A. I think as high as 60 inches has been obtained at one time. I think that is about the maximum amount.

Q. And the average during those years was about what?

A. I should judge between 40 and 50 inches, as long as I knew anything about them.

Q. When was the last year?

A. 1902. When it was conveyed to the Cucamonga Water Company.

Q. When you were making measurements for the Cucamonga Water Company that you gave us the other day, did you make measurements of the flow from the Lone Star tunnels and wells?

A. Yes, sir.

Q. Will you give us those measurements?

A. I don't find any in 1901 or '2.

Q. When you were making those measurements at the 30 inch pipe and the weirs to the west of the tunnel, 3000 feet west, you were not making any measurements of the waters which came from the Lone Star wells?

A. Yes, sir; I did make some. I find one here May 29, 1902, from the Lone Star well, at 9:40 in the morning. The depth on the wrir was .292 and the width of the weir was 30 inches.

Q. Where was that weir set?

A. My recollection is that it was very near the mouth of the tunnel, which is at the northwest corner of the 30-acre tract, near the Base Line.

Q. Is that near the mouth of the tunnel?

A. Yes, sir; probably a few hundred feet from the mouth.

There was a measuring box.

Q. How many wells were there on that Lone Star tract?

A. Two.

Q. No more?

A. Not that I remember of.

Q. Did this weir that you speak of measure all the water that was proceeding both from the tunnels and the wells?

A. Yes, sir; there was no other pipe line or other means to convey the water away except through that division or measuring box near the northwest corner of the 30-acre tract. It is marked on this exhibit "Weir No. 3."

Q. On what exhibit? Plaintiffs' Exhibit 1?

A. It is marked on Exhibit 1.

Q. Did this Lone Star tract have any other designation?

A. Yes; lot 11 and 12,-I don't know what the block is,-of the Cucamonga Homestead Association.

Q. Do you know the number of acres?

A. 40 acres.

Q. Wasn't it sometimes known as the 30-acre tract?

A. No, sir.

Q. You were a witness in the McPherson case?

A. Yes, sir.

Q. I want to read from your evidence a moment, and ask you if you remember giving this testimony:

Mr. Haskell: I haven't objected to this line of testimony, but the testimony now brought out by the defendant from this witness is in the line of original testimony, not gone into in the examination in chief. Now when a question is answered in a way that does not satisfy their interests, they seek

to crossexamine their own original testimony.

The Court: Assuming that he is their own witness, they have a right to impeach him by showing that he has made other statements at other times.

Mr. Chapman: I am not trying to impeach him so much as to refresh his memory. I am reading from page 845.

"Q. You have been familiar with localities where places were selected to put down wells, and with the water business generally?

A. Yes, sir.

"Q. And you selected it because you thought there was water there?

"A. If I hadn't thought I would get water I wouldn't have put it there.

"Q. That is, you put it down because you thought you would get water there?

"A. Yes, sir.

"Q. Why did you think so?

"A. They tried everywhere else and hadn't found it, and I thought I would try a new place. That is the only reason under heaven. If I was going to to-day I wouldn't do it there. I would bore on the Red Hill. It is better ground.

"Q. They have n't put any there?

"A. Yes, sir; I have one on the Lone Star, and it is the best one we have.

"Q. That is not on the Red Hill shown on this map?

A. Yes, sir.

"Q. The Lone Star?

"A. Yes, sir; the elevation is 1457 feet,-- the highest well

there.

The Court: Q. Is that the Red Hill?

"A. Yes, sir. It runs right back here. These contour lines run around like that. That is the high point there is anywere from Lytle Creek on that line till you get clear over here.

Q. But there is a ridge running up to the mountains?

"A. Yes; about here. Q. And below the Lone Star there was an old spring years ago. The Lone Star spring is located below where the Lone Star wells are?

A. Yes; sir; southeast from there.

"Q. And there is a sort of a swale or basin running up through there towards the mountains, and in the other direction also?

"A: There is, perhaps five or six hundred feet to the east of it and perhaps five or six hundred feet to the west of it. But that particular well is on the highest point of the land.

"Q. How deep was the well?

"A. It is shown on that blueprint. It is well no. 6.

"Q. 459 feet is correct, is it, Mr. Stewell?

"A. I think that is the depth.

Q. There is an old water course running up there down below the Lone Star?

"A. I should judge it was the Divide

"Q. Where that well is?

"A. Yes, sir; at the highest point. The water will run from there either way, east or west.

Q. There is a water course below the Lone Star, isn't there?

"A. There is a little draw up there and there used to be a spring perhaps 1000 feet from there, and the extension of it north would be seven or eight hundred feet from the well. Then there is another draw over on the other side that runs up to what is called the Haskell place on this map.

Q. At each of these places wells are found?

"A. Yes, sir. Anywhere in three miles from there, either way.

"Q. You only know that where you put them down? You haven't put them down anywhere?

A. Well, there is a well away out here on the edge of the map; ~~put down from a shaft~~ I put down two shafts on Lot 12 myself. There is water flowing in this well; ~~in~~ there is water flowing in that well in defendant's exhibit no. 4 on the east edge of the map about the Hermosa Colony, there is a well with water in it. And on lot 12 and just east of ____ Avenue above the Base Line there are two shafts with water at an elevation of 1324 feet and 1325 feet respectively. There is water on the 35-acre tract at the northeast corner of Hellman Avenue and Base Line. There is five wells on that tract, all of which produce water, 70 or 75 inches being pumped from them to-day, and there is a tunnel on that same tract that flows 15 inches of water. Then the Lone Star Springs on Lot 6, there is some water coming out of the ground there yet. There is a well on Lot 12 adjoining, with water at 1388 feet."

What wells were you speaking of on the 35-acre tract?

Mr. Haskell. We object to the question on the ground that the witness is entitled to have the map shown him to which that testimony refers, before answering it.

The Court: Yes. Do you understand the question?

A. I understand the testimony perfectly well.

Q. What is the 35-acre tract there mentioned?

A. A tract of land south of the Base Line.

Q. And it is not the Lone Star tract?

A. No, sir.

Q. And Lot 12 is a part of the Lone Star tract?

A. One lot 12 is. The other lot 12 referred to in that testimony is in another bl ock.

Q. You were not there testifying as to wells in the Lone Star tract?

A. No, sir.

Q. The tunnel that you referred to, is that a different tunnel?

A. I was referring in that testimony to the Lone Star tunnel.

Q. What was the Lone Star Spring?

A. On Lot 6, right adjoining Lot 12.

Q. How far are the five wells that you speak of on the 35-acre tract from the Lone Star?

A. The nearest one is probably 300 feet from the Lone Star Springs.

Q. And the furthest how far?

A. Diagonally across a 35-acre lot.

Q. Did you make any measurement of these wells in 1902?

A. Yes, sir.

Q. How much did you find there?

A. I can't tell you the individual wells; I can tell you the aggregate.

Q. Well, the aggregate-- of the five, do you mean?

A. Do you want them on the same date?

Q. As nearly as you have any of those dates. Give us that too.

A. I have got this twice a week all through the year, probably.

Q. 1902?

A. Yes, sir; the early part of it; but it would take a week to read them through.

Q. I don't want to take a week, but give us some of the dates, close to the co responding dates.

Q. Do you want all the measurements at all the places? It will save time if you take them all.

Q. Go right ahead then.

A. On December 2, 1901, at 10:20 A. M., I measured the Ontario water. .375 by 40 inches.

Mr. Britt: Q. Were was that?

A. 3000 feet west from the mouth of the tunnel no. 2.

Mr. Chapman: That is not the five wells referred to here?

A. I am giving you all the measurements on that day.

Q. You have given those.

A. I don't think I have given you that date.

Q. Then give us that.

A. 10:25, Cucamonga, .158 by 30 inches. That is at the mouth of Tunnel No. 2.

Q. That is, Cucamonga Water Company?

A. Haskell well, approximately 2.56 inches.

11:25, the South Side, as I call it, what you call the 30 acre tract, .301 by 30 inches.

Q. Does that measure all five of those wells?

A. Yes, sir; everything that comes from the 35 acre lot, and anything that might come from that other lot 12.

Q. Was that measured over a weir?

A. Yes, sir.

Q. What was its width?

A. 30 inches wide. That weir is at the same place that the Old Settlers box weir is, at the center of section 3, on Hellman Avenue.

. Is that where the water is divided?

A. Yes, sir.

Mr. Britt: This is incompetent evidence. It is not cross-examination.

Mr. Chapman: I am putting it to him as cross-examination.

Mr. Britt: We object to it as not proper cross examination.

The Court: The objection is overruled. I can't tell what its effect will be at this time. It is all in the same general controversy.

Mr. Britt: We haven't any disposition to be very captious or technical, but it looks as if it was independent testimony of the defendant.

The Court: I think you are bound to get it in before you get the case submitted, any way.

A. I have a measurement of December 14, South Side weir, 11:35 AM . Depth .315; width 30 inches. Old Settlers box, 2-3/8 inches. pressure over the center of the aperture.

Mr. Haskell: Q. What does the South Side refer to?

A. The 35 acre lot.

January 5, 1902, 11:20 A. M. South side .279 by 30.

Q. Were those five wells that you spoke of pumped right straight along every summer, during the irrigating season?

A. I couldn't say as to that.

Q. Did you ever measure them before that time?

A. Yes, sir.

Q. How long before?

A. From the time the first well was bored.

Q. How much water was yielded by those wells when they were first bored?

A. I think some of thewells flowed as high as 50 inches.

Q. Do you remember what all together furnished?

A. I could not. I should judge the yield was about 60 inches.

Q. Of the whole five of them?

A. Yes, sir; some of them were pumped at times, but generally it was gravity flow.

Mr. Britt: Q. Do these measurements that you are giving about those wells include measurements of pumped water as well as natural flow?

A. My impression is that they were being pumped at that time.

Mr. Chapman: Q. All of them?

A. I think there was just one well pumped.

Q. How were the other four being used?

A. Well, the wells in that tract were sympathetic. If you pumped one the others went down.

Q. And if you pumped one you would practically pump all of them?

A. Yes, sir.

Q. They were not artesian wells then when they were ori-

ginally bored? When was that?

A. I think in '98

Q. How much water did they pump?

A. I think about 50 to 60 inches.

Q. Do you remember in 1899 in March of negotiating a sale for the Cucamonga Fruit Land Company to the San Antonio Water Company, the defendant here, of the developed water on the tract just west of the 90-acre tract?

A. Yes, sir.

Q. Were there wells there then?

A. Yes, sir.

Q. How many?

A. One.

Q. Only?

A. There was one well that I was negotiating about.

Q. And which well was that?

A. Number 4.

Q. That is the Stowell well?

A. Yes, sir.

Q. Had you sunk another well close to that and prior to these negotiations?

A. I think in '97 or '8 there were two wells sunk very near there .

Q. How far apart were they?

A. I think about 100 feet.

I think the two wells were about 20 feet apart. I think they were numbers 7 and 8, if I remember right. I couldn't tell without looking at the old diagram.

Q In the course of those negotiations do you remember meet-

ing Mr. Finkle, the engineer there on behalf of the San Antonio Water Company, and Mr. Shepherd the secretary of that company, out on the ground, and discussing the matter with them?

A. I presume I met them there.

Q. Do you remember on the 11th of March, 1899, that they were there and asked you whether those wells were likely to affect or be affected by other wells in that vicinity, and your telling them that there wasn't any danger of any influence exerted by one over the other at all?

Mr. Britt: Objected to as not proper crossexamination.

The Court: Sustained.

Mr. Chapman: He testified yesterday as a matter of fact that the Stowell well when it was cut down 10 feet below the level, he took the water out of the shaft of a well sunk by Stamm & Frankish above Base Line, and I want to prove by this witness or others, if he disputes it, that when Finkle on behalf of the San Antonio Water Company and Shepherd the secretary of that company were negotiating for the purchase of the right to develop water on this tract, that this witness told them that there was no danger of an influence of one well in that section on another, where there was a distance of 100 feet, and that they asked him particularly about the wells above Base Line, whether one of them exerted any influence on the other, and he told them they did not. That was in 1899. when he says he cut down the wells and emptied the water.

The Court: In so far as you ask for his observation as to the facts, it is all right.

Mr. Chapman: I am not asking him for his opinion, but as th the fact.

The Court: Asking a man if a thing is likely to happen is the same as asking his opinion if it will happen. Sustained. Defendant excepts.

Q. I will ask you if on the 15th of March, 1899, Mr. Finkle and Mr. Shepherd did not ask you whether the Stowell well no. 4 had affected or had been affected by any of the wells north, including the Stamm and Franklish well which you spoke of yesterday, and did you not tell them that it was not affected?

A. I don't remember any conversation of that nature. But I did point out to them that wells standing 20 feet apart,- that one sunk in the tunnel did not affect a well 20 feet distant where the water stood 80 feet above the one that was cut off below.

Q. I don't think I exactly understand that answer. Where were those wells that you speak of?

A. One was in tunnel no. 2 and the other was 20 feet distant from it. If they were sympathetic and one acted on the other the one that was cut off in the tunnel would drain the wells adjoining.

Q. But it didn't?

A. It didn't.

Q. The water stood how high above it?

A. 80 feet.

Q. You did tell them that?

A. I showed it to them on the ground.

Q. And showed them that that was the fact?

A. That in that ground they didn't affect one another.

Q. Did they not at that same time ask you in regard to what had been observed with reference to the wells north of there and including the Frankish & Stamm well which you spoke of yesterday, and did you not tell them that neither was affected by the other at all?

A. I can't state whether I made any such statement as that, but I never did notice that any wells on the 90-acre tract or about there were affected by any wells above.

Q. How many wells have you sunk in that section of the country?

A. A couple of dozen.

Q. And you have known a good many others?

A. Several.

Q. Did you in your experience there and in the management and conduct of your affairs pay any attention to that particular question?

A. Yes, sir.

Q. And didyou attempt to observe as a fact how one well was affected or seemed to be affected by the operations upon the other?

A. Yes, sir.

Q. And you did that at this tunnel no. 2 when you were boring those wells, did you not?

A. Yes, sir. The only place where I ever found any direct sympathy between any wells was on the 30 acre tract.

Q. That is east of the Cucamonga Springs?

A. The furthest east of any development with which I was connected.

Q. You are speaking now not of any opinion but of facts observed by yourself?

A. Yes, sir.

The Court: Did you state to them the absolute facts?

A. I showed them right on the ground.

Q. Whatever statements you made, were in connection with the facts that you illustrated on the ground?

A. Yes, sir.

Mr. Chapman: Q. Did you tell them or either of them in that or any other conversation when they were negotiating for this right of development, of the fact that you stated yesterday, that in '96 when you cut the well No. 4 10 feet below the level of the water that the water in the shaft of this well of Frankish & Stamm went out?

A. I didn't tell them that. It was a matter of common notoriety.

Q. You didn't tell them?

A. I probably did not.

Q. Mr. Finkle did make a great many inquiries in regard to that matter, with a view to knowing how much land to get to protect a well from influence?

A. I think we talked it over some. I don't think he made any inquiries. At least, it was not impressed on my mind.

Q. Do you remember a conversation that has been given here that Mr. Shepherd was present?

A. No, sir; I don't remember any particular occasion when I met them together.

Q. Do you remember any particular dates?

A. I suppose from memoranda I could tell who was there?

Q. Have you got the memorandum with you?

A. I may have, if you give me the date.

Q. I wish you would turn to the date March 15, 1899.

A. I haven't any date here as early as March. The first I have is April 4, 1899.

Q. Do you remember when you concluded that transaction with the San Antonio Water Company?

A. I think the first transaction was closed up on April 8, 1899.

Q. And what is the first date that you have?

A. It say Tuesday, April 4. But I find a date March 22.

Q. Haven't you got one of March 15th?

A. No.

Q. Who was present on March 22?

A. It says "F. C Finkle's measurement made March 15, 1899."

Q. It don't contain any notes made of a conversation between you?

A. No, sir; merely the summary of the measurements which he made at that date.

Q. Does that memorandum show that anybody else was present?

A. It is just a memorandum of the measurements; it does not show that anybody else was present.

Q. Were you an officer of the Cucamonga Fruit Land Company at that time?

A. I was a director.

Q. Who was president?

A. I. W. Hellman.

Q. Did you hold any other office than that of director?

A. I might have been vice president at that time.

Q. Do you know who negotiated the transaction with the San Antonio Water Company on behalf of theCucamonga Fruit Land Company?

A. I think it was done through an agent in Ontario.

Q. I mean on behalf of the Fruit Land Company?

A. The board of directors.

Q. Didn't you yourself conduct the negotiations mainly?

A. To a certain extent, yes, sir.

Q. Did you hold any office in the Cucamonga Water Company at that time?

A. I think I was president of the Water Company.

Q. And how long did you continue to be president?

A. Till about midsummer, 1902.

Q. And how long before that had you been president?

A. Probably six or seven years.

Q. Now have you got the memoranda or notes from which you can give us the measurements which you made of the wells and all other measurements on the east side, from '99 down?

A. I don't find any measurements in '99 on those wells.

Q. In 1900? I am speaking of the East Side wells now.

A. I understand. Here is a measurement of theLone Star, Friday July 14, 18[illegible]. That is the nearest.

Q. How much?

A. 3-15/16 in depth, 30 inches wide.

Q. That is over the same weir?

A. The same size weir.

Q. Not the same weir? A. I think so.

at the same place?

A. I think so.

Q. Did that include pumped water?

A. It doesn't say. I don't think there was any fixed weir in there to mea sure that in '99.

Q. Was there in 1900?

A. I think Mr. Claffy made a number of measurements there at that time, but I don't think I had any weir to measure with.

Q. In 1901?

A. January 17, 1900, is a measurement of the Lone Star: 2-5/8 in depth, 30 inches in width.

Q. Did that include pumped water?

A. It doesn't say.

Q. Can't you state whether they were pumping at that time?

A. These memoranda were made for my own use from day to day, without regard to the future. I never had any idea I would be called on. I made them to make my report to the board of directors. If I had burned the books then I should have been very happy now.

On January 27, 1900, at 2:20 P.M., Old Settlers Box, it was running over the overflow 7/16 inches. The South side, the depth was 2-9/16 inches and the width 30 inches. That was surely at that time gravity water.

On February 18, 1900, 3:50 P.M., South Side, 2-7/16-- No, it is "30" instead of South Side. That is a measurement of the 30-inch pipe over at the Mountain View Hotel. I measured the Old Settlers ~~xxxx~~ Box at 4 P.M. and it was half an inch over the overflow.

The Lone Star at 4:30 measured 1-1/2 inches by 30 inches.

Q. Did that include pumped water?

A. I don't know.

At 5:45 I measured the water coming from the 35 Acre lot, South Side water at Ninth Street in Ontario or what is now Uplands, 3-1/2 inches deep by 18 inches.

Q. Where was that?

A. In Upland; in the Ontario colony.

Q. That isn't on the east side.

A. The water came from the 35-acre lot.

There is a memorandum on March 8, 1900, that they were getting the engines ready on the Lone Star to pump water. The South Side or 35-acre lot, or the South Side box, measured 1-3/4 inches deep by 30 inches wide.

Q. Are those Lone Star wells sympathetic?

A. No, sir. No other wells anywhere there are sympathetic except the ones on the 35 acre lot.

Q. When was that second Lone Star tunnel constructed?

A. There was only one Lone Star Tunnel.

Q. Well, you extended it at one time?

A. Yes, sir; in '97.

Q. How far was it extended?

A. I think the original tunnel was about 400 feet long.

Q. And the extension was from the north end of the Lone Star?

A. Yes, sir.

Q. And the waters obtained by that extension were carried through the main Lone Star Tunnel?

A. Yes, sir; I think it was extended about 1000 feet.

Q: In 1897?

A. Most of it.

Q. When was it completed?

A. I don't know; that was after my day After 1902, I think.

Q: How far was it extended in 1897?

A. About to the first of the wells.

Q. Of the Lone Star wells?

A. I don't know; it might have connected both of the wells.

Q. And what distance would that be?

A. 1000 or 1200 feet.

Q. Do you mean now that it might have been extended to both of those wells in 1897 or '8?

A. Yes, sir.

Q. Well, proceed with your measurements.

A. There is a memorandum here about well no. 4 on March 8, 1900. Well No. 4 siphoned down about 30 feet. Well No. 8, 23-1/2 feet to water. That is the well right adjoining it.

Q. Have you got any measurement of the wells on the east side about that same time?

A. The only thing I measured that day was the Ontario and Cucamonga.

Q. That is not on the east side.

A. And on the south side of the 35 acre lot. But I gave that measurement. On March 14 at noon, 1900, Lone Star weir, ~~xxxx~~ 3-7/16 inches depth by 30 in width.

On the 14th of March at 2:10 P.M. Lone Star pumped, 3-1/4 in depth and 30 inches in width.

At 2 o'clock P. M. the South Side, ~~xxxxx~~ 1-11/16 inches

in depth and 30 inches in width..

The Old Settlers Box discharging water under 4-1/2 inch pressure.

April 4, 1900, Lone Star, depth 2-15/16 inches, width 30 inches.

South side box, .14 in depth and 30 inches in width.

April 1 , 1900, 8:55 in the morning, the Lone Star, 3 inches in depth and 30 inches in width.

April 13, 1:40 P.M., South Side box 1-3/4 inches in depth and 30 inches in width.

April 16, 3 P.M., South Side box 1-11/16 inches in depth and 30 inches in width.

Old Settlers box discharging water under 4-7/16-inch pressure.

April 30, 2:15 P.M., Lone Star 3-7/32 inches in depth and 30 inches in width.

2:55, Old Settlers box discharging under 4-3/8 inches pressure.

May 5, 1900, 1:35 P.M., Southside box 2-3/16 inches in depth and 30 inches in width.

Q. What place did you say that was?

A. In the center of section 3.

Q. South--

A. South Side box.

Q. Where is that?

A. The center of section 3.

Q. Where does that water come from?

A. That went to the South Side tract , Ontario.

Q. Where didit come from?

A. From the 35 acre lot.

Q. Is that all the water that came from the 35-acre tract?

A. Yes, sir.

May 28, 1900, 2:10 P.M. Lone Star, 3-1/4 inches in depth and 30 inches in width.

June 9, 9:30 A. M., Lone Star, .173 of a foot, 30 inches in width.

June 20th there is a note "finished well on the west branch of "Y" Tunnel."

Q. What year was that?

A. 1900/

2:10 P.M., "Y" Tunnel, 3-1/4 inches in depth and 36 inches in width. And here is the log of the well.

June 24, 3:50 P.M., Lone Star, using compressor on well no. 6. Depth on the weir 2-1/4 inches, 30 inches in width.

June 27, Lone Star well No. 5, ~~depth~~ well pump 24 revolutions, 2-1/4 inches in depth by 30 inches in width.

5:15 P.M. South Side 2-3/4 inches in depth, 30 inches in width.

Friday June 29, 3 P.M. Southside box, depth 2-7/8 inches, width 30 inches.

June 30, 11:15 A.M., Lone Star pumping both wells, 3-7/16 inches in depth by 30 inches in width.

July 2, Southside, 2-7/8 inches in depth by 30 inches wide. "Y" Tunnel, 4-1/4 inches in depth, 36 inches in width.

July 11, 1900, 12:40 P.M., "Y" Tunnel, 3-11/16 inches in depth

depth and 36 inches in width.

July 13, 2:25 P.M., Lone Star, 3-5/16 inches in depth by 30 inches in width.

July 27, 12:15 ~~in depth~~ P.M., Lone Star 2 3-1/4 inches in depth and 30 inches in width.

Southside, .147 of a foot in depth and 30 inches in width.

August 8, 1900, 1:30 P.M., Southside, .243 of a foot in depth and 30 inches in width.

August 24, 12:55 P.M., "Y" Tunnel, depth .274 of a foot, width three feet.

1:35 P.M., Lone Star-- the figure is so blurred that I can't say.

September 4, 1900, 12:50 P. M., Southside, .228 in depth, and width 30 inches.

Q. .228 means thousandths of a foot?

A. Yes, sir. September 19, 11:10 A. M., Southside, 1-9/16 inches in depth and 30 inches in width.

11:50 "Y" Tunnel, depth .253, width 3 feet.

12:10 P.M., Southside, .235, 30 inches in width.

October 3, 12:35 P.M., Southside, depth .129, width 30 inches.

October 16, 12:40 P.M., Lone Star 1 inch in depth and 30 inches in width.

November 12, Southside, 1-1/2 inches in depth, 30 inches in width. Lone Star, 2-1/2 inches in depth, 30 inches width.

Mr. Gregg: Q. You are turning now to measurements of another year?

A. Yes, sir.

Q. What year are you in now?

A. The year 1900.

Q. When you give decimals what do you mean?

A. Thousandths of a foot.

December 4, 1900, 10:55 A. M., "Y" Tunnel .29[illegible], width 3 feet.

Here is a fact about well no. 4, if you wish it.
January 11, 1901--
Mr. Gregg: We are just asking you about the east side.
A. That is the time the well was cut into the tunnel.
Mr. Britt: Q. Is this a measurement on Well No. 4?
A. Indirectly, yes.
Mr. Britt: I would like to know what the information is. However, you can pass it and I will return to it on re-direct examination.
A. Feb. 11, 1901, 1:30 P. M., Lone Star, .029 in depth, 30 inches in width.
April 16, 1901, 2:25 P.M., "Y" Tunnel, .352 in depth and 3 feet in width.
2:45 P. M. Lone Star, .148 in depth, 30 inches in width.
May 4, 1901, 1:45 P.M., Old Settlers box discharging under four-inch pressure.
2:45 P.M. Lone Star well No. 5 pumping with air. Depth on weir, 2-1/4 inches, width 30 inches.
May 18, 1901, 10:[illegible] A.M., "Y" Tunnel, .317 in depth, 3 feet in width.
Lone Star, depth 2-3/8 inches, width 30 inches.
Old Settlers box, .34[illegible] in depth through an aperture 16 and a fraction inches by two inches.
Southside box, .017 in depth and 30 inches in width.
July 26, 1901, 10:45 A.M. "Y" Tunnel, .3[illegible] in depth and 3 feet in width.
1:20 P.M. Southside box, .2[illegible]8 in depth, 30 inches in width.
Mr? Gregg: Q. Were they pumping the wells at the "Y" Tunnel at that time? A. I think not.

August 18, Southside, 10:45 A.M., .328 in depth and 30 inches in width.
Old Settlers box discharging under 4-inch pressure.
2:20 P. M. "Y" Tunnel .224 in depth and 3 feet in width.
There are a number of measurements here that I can't make out, so I won't read them.
September 17, 1901, 12:20 P. M., "Y" Tunnel, .173 in depth, 36 inches in width.
December 2, 1901, 11:25 A.M., Southside, .301 in depth and 30 inches in width.
December 14, 11:35 A. M., Southside box, .315 in depth and 30 inches in width.
December 23, 10:50 A. M., "Y" Tunnel, .249 in depth and 3 feet in width.
January 5, 1902, 11:20 A. M., Southside box, .273 in depth and 30 inches in width.
February 21, 1902, 3:12 P.M., Southside box, .285 in depth and 30 inches in width.
"Y" Tunnel, .246 in depth and 36 inches in width.
April 25, 1902, "Y" Tunnel, .239 in depth, 3 feet in width.
June 6, Southside, .276 in depth, 30 inches in width.
"Y" Tunnel, .118 in depth and 3 feet in width.
Mr. Gregg: Q. Have you any measurement of the Lone Star and the 30-acre tract on that day?
A I have no measurement of the Lone Star on these dates that I have not read.
September 2, 1902, 2:10 P.M., "Y" Tunnel, no water.
2:30 P. M., 30 inch pipe line, 7/8 of an inch in depth, two weirs, 35 inches wide.
October 16, 1902, Southside, 2-7/16 in depth, 30 inches in

width.

A. I don't think I have got any other measurements after that date.

Mr. Chapman: Q. Do you know where the China well is?

A. Yes, sir.

Q. Whereabouts is it located?

A. It is located in the upper part of the Cienega on the east side, I should say 700 feet west of the west branch of the "Y" Tunnel.

Q. And how far from the Cucamonga Springs?

A. Immediately north of the Cucamonga Springs.

Q. How far distant?

A. Perhaps 150 feet.

Q. Do you know when that well was put down?

A. No, sir.

Q. Do you know the depth of it?

A. No, sir.

Q. Do you know whether it was pumped or not?

A. Yes; I have seen them pumping it.

Q. Did you ever make any measurements in that well?

A. No, sir.

Q. At what time do you know of its being pumped?

A. At the time I was working on the development on Hellman Avenue

Q. Do you remember what year that was?

A. I think it was about '99 or 1900. It was a very small affair and a very poor pump, and they pumped very little water. Possibly 20 inches at the outside.

Q. That is the China well?

A. Yes, sir.

Q. What well was it of which you said you had the log?

A. On the branch of the "Y" Tunnel.

Q. What was the character of the material found there?

A. I can give you the log, if you wish it.

Q. Can't you give us a general description of it?

Mr. Britt: Let him give the log.

Q. All right: Give us the log of that well.

A. West branch of "Y" Tunnel. Shaft 42 feet in depth.

A. From 42 to 62 feet, heavy gravel.

62 to 108 feet, water gravel.

108 to 110 feet, clay.

110 to 146, water gravel.

146 to 148, clay.

148 to 176, gravel.

176 to 180, clay.

180 to 186, gravel.

186 to 190, clay.

190 to 212, gravel.

212 to 250, hard gravel.

244 feet of 12 inch pipe.

250 to 252, dead gravel. That is gravel without water; dry.

252 to 314, hard gravel.

314 to 320 water gravel.

320 to 324, clay.

324 to 334, water gravel.

334 to 338, yellow clay.

338 to 358 ~~clay~~.coarse clay.

358 to 362, clay

362 to 370 dead gravel.

370 to 374 clay.

374 to 504 gravel.

414 feet of 12-inch casing; balance 10-inch casing.

Top 244 feet 10-inch casing.

Mr. Haskell: Q. Where is that well located on this map exhibit 1?

A. At the extreme end of the west branch of the "Y" Tunnel.

Q. Could you locate it on plaintiffs exhibit 1? Is it marked "Hellman Well No. 2"?

A. Yes, sir.

Q. On this exhibit 1?

A. Yes, sir.

Mr. Chapman: Q. Does the place where you have the entry of that log show the dates when they were observed?

A: I have them scattered through the book, at the times that I was there.

Q. Could you tell exactly when that well was sunk?

A. I could, by hunting it up.

Q. When did you commence it?

A. I couldn't tell off hand, but probably sixty days before the 24th of June.

Q. 24th of June of what year?

A. 1900.

Q. Is that the first well bored in the "Y" Tunnel?

A. That is the second well. For instance, on Monday, May 28, 1900, in one of my travels around to see what was going on, I kept account of what work was being done and I set it down. At 2;40 P.M. on Monday the "Y" Tunnel was in gravel.

Q. What day of the month?

A. The 28th of May, 1900.

Q. Have you in that book the log of any other well?

A. Only that one.

Q. I mean in that way.

A. When I passed a well I found out what they were digging and I set it down in this book.

Q. Have you the logs of any well on thewest side of that Red Hill?

A. I have logs of all of them.

Q. In that book?

A. No.

Q. Have you the log of any of them in that book?

A. I presume well no. 1 would be in that book somewhere, or in some of these books.

Q. What do you allude to as well no. 1?

A. The "Y" Tunnel well no. 1.

Q. But you have no well on thewest side of the Red Hill in that book?

A. No, sir.

Q. When was well no. 1 bored?

A. Immediately preceding well no. 2. Probably three months proceeding.

Q. How far from it?

A. I judge about 300 feet.

Q. Have you got the log of that well there?

A. I couldn't locate it just at this moment. They seem to be 600 feet apart, according to the scale on the map,-- between well no. 1 and well no. 2

Q. And which is the most northerly?

A. Well no. 2 is a few feet further north.

Q. You say you have the log of well no. 1?

A. Only as it is scattered through by the different dates. I haven't got it compiled in any one place.

Q Did you in keeping a record of the wells keep a record of the temperature of the water in them?

A. Yes, sir.

Q. Whereabouts?

A. The "Y" Tunnel wells, I had the temperature of those.

Q. Did you have any on the west side?

A. Yes, sir.

Q. Which one?

A. No. 4.

Q. Have you got it there?

A. No, sir.

Q. Do you know what it was?

A. My impression is that it was about 76. The "Y" Tunnel well was about 76.

Q. Any other well that you kept the temperature of?

A. I don't think I have any record of any of them.

Q. Do you know whether the temperature varied as the well went down?

A. I don't remember anything about it. I don't think I ever took the temperature except after they were finished.

Q. Did you ever take the temperature of the cienegas?

A. Yes, sir.

Q. What was it?

A. I don't remember.

Q. Have you no memorandum of it?

A. Somewhere, yes.

Q. You testified about temperature in the McPherson case, did you not?

A. I don't remember.

Q. Do you remember testifying as follows:

"Q. Did you in the course of putting down those wells take the temperature of the water that you were receiving which flowed from these wells at these great depths, in the summer time?

A. Yes, sir.

Q. What was the temperature and how did it compare with the temperature of the surface flow throughout that country?

A. The wells varied from 70 degrees, the warmest, to 60 degrees, the coolest.

"Q. That was in the summer?

A. Yes, sir.

"Q. And what was the temperature of the cienegas?

"A. The summer temperature varies from 64 to 65.

"Q. So that the cienega water is cooler than what comes from the deep wells, even in the summer time?

A. Yes, sir; very much cooler." Do you remember that testimony?

Mr. Haskell: Objected to as incompetent, irrelevant and immaterial and has nothing to do with the issues of the case, and from which no inference can be drawn. It is a well known fact that the character of the soil through which water passes and other conditions changes its temperature.

Mr. Chapman: If you are correct about that you can't be

hurt by the evidence.

The Court: Overruled. Intervenor excepts.

A. My recollection of those things was fresh in my mind at that time, and I presume I testified to it as there stated.

Q. And if you did so testify there then it was correct?

A. Yes, sir; much more apt to be correct than anything I could guess at now.

Re-Direct Examination.

Mr. Haskell: Q. In regard to this well of which you have given the log, you have given a part of the log as consisting of yellow clay. Can you describe that yellow clay?

A. Only the difference in the color.

Q. Was it of a fine nature?

A. I don't remember.

Q. Or compact or mixed with gravel or sand?

A. I can't tell you anything about it at this late date.

Q. Of this water gravel: What kind of gravel did you denominate water gravel?

A. Any coarse gravel that has water in it-- not dry.

Q. Then you denominate another class as "gravel". What was that?

A. That is gravel that is more of a cemented nature. That does not hold water. When a well man pulls up his pump he can tell whether there is free gravel in it. And free open gravel is called water gravel, where if he pulls the pump up the water follows it.

Q. And that which you call "gravel" is what?

A. Dead gravel won't respond with water when the pump is pulled up from it.

Q. You also classified a certain portion of this as being clay. What was that?

A. I haven't any definition of clay. It is clay, that is all.

Q. Pure clay, not intermingled with anything else?

A. It is intermingled with sand. All clay there is.

Q. You also denominate dead gravel.

A. That contains no water and it is generally between two impervious strata of clay.

Q. Does this dead gravel solidify in any way?

A. It may, often; if it was solidified very much it would be called cemented gravel.

Q. And in your classification did you distinguish between dead gravel and cemented gravel at all, or did you call it all dead gravel?

A. No, sir; I call it cement gravel. Cement gravel is hard to drill through and dead gravel is comparatively easy.

Q. Now with reference to the Eady Tunnel which you refer to a well flowing into it and another standing not far away, with water at a higher elevation. Will you locate those two wells on this map Exhibit 1?

A. Well no. 8, which is close to the 1896 well, I have marked on this map.

Q. That is which one of the wells in regard to which you testified?

A. I don't remember.

Q. And which is the other well marked on this map?

A. I don't recognize it by this map.

Mr. Brit: Q. You mentioned on March 8, I think it was,

1900, Well No. 4 was siphoned down about 50 feet. If you can find that entry I would like to ask you a few questions.

A. I have found it.

Q. What is the entry at length?

A. It says 20 feet. Well No. 4 siphoned down about 20 feet.

Q. That is the well also called the Stowell well?

A. Yes, sir.

Q. Was that the first time that that well was lowered by means of a siphon?

A. Oh, no. I think it was lowered away back in '95, but there is different memorandums in different places. Right in this it says Well No. 8, 25.5 feet to water.

Q. And what you call Well No. 8 is how far distant from the Stowell well?

A. Just within a few feet of it.

Q. This siphon process was from the well into the Eddy Tunnel?

A. Yes, sir.

Q. And the 20 feet lowering by means of the siphon was from what level, if that is what it means?

A. Well No. 4, when it was not siphoned, would flow over the surface. When it was siphoned down it went down sometimes 20 feet and sometimes more and sometimes less, according to how well the siphon would run. Sometimes air would get into it and it wouldn't work so well.

Q. The siphoning of a well, is it an intermittent process?

A. Sometimes the water went over by gravity and sometimes it would draw down 20 or 25 feet.

dQ. When you use this expression"the well was siphoned down 20 feet, does that mean that it remained permanently siphoned down that far, or that it was just a single occurrence, and that it rose again?

A. It was supposed to be a permanent thing, to siphon it downto the limit.. There was an arrangement in the siphon where the workman could open a valve and open the vent and let the air get in or out, and then he could close it, so that it would draw the water down a good deal more than if there was air in the siphon.

Q. Was the siphon a fixed appliance?

A. Yes, sir.

Q. And runs constantly all the time?

A. Yes, sir.

Q. Did the siphon require constant attention, or when it was fixed in place did it work automatically?

A. They generally look after it once a week.

Q. So that that entry means that the well was at that time pumped down from the surface ~~marks~~ of the ground about 20 feet?

A. I had the habit of measuring all the wells to see how far to the surface of the water it was, of which I have hundreds of memoranda and measurements.

Q. Does that signify that by means of the siphon the water was lowered 20 feet lower than the surface of the ground?

A. Yes, sir.

Q. About how long did it remain at that level?

A. I didn't take any other memorandum of it. There is of other wells, but not of that well.

Q By this mention of the siphon producing a lowering of the water, I suppose it indicates that the well had not been connected with the Eady Tunnel?

A It was not connected till January, 1901.

Q. Have you a memorandum of it, of the time of the connection of that well with the Eady Tunnel?

A. Yes, sir. I think it was January 11, 1901. The siphon stopped about 10:30 and the water broke in at the face of the tunnel and that stopped the siphon on the surface about 10:30 on the morning of the 11th day of January, 1901.

Q. And that connection was made at the grade of the tunnel, I suppose?

A. Yes, sir.

Q. When that connection was made what was the effect on the wells? Do you know whether it increased the flows?

A. From the measurement, it increased the flow of the well about 30 inches.

Q. Do you know how much it discharged into the tunnel?

A I do not.

Q. Do you know at any time afterwards?

A. I don't remembarx ever ascertaining exactly what that well flowed.

Q. After that connection with the tunnel, I suppose the water did not stand any higher in the well above the tunnel?

A. No, sir.

Q. It all poured out into the Eady Tunnel from the well directly?

A. Yes, sir. That is it.

Q. Was that Stowell Well or Well No. 4 ever capped at the surface?

A. Yes, sir.

Q. At what time?

A. When it was first bored we plugged it up for the time being.

Q. How long was it kept capped?

A. It wasn't capped permanently. The way we stopped the water, we extended the pipe higher up so it wouldn't over flow it. We regulated the flow by the elevation of the discharge.

Q. It discharged 10 feet above the surface?

A. That was about the limit, when it was first bored.

Q. And you regulated the flow by cutting the pipe lower down or below the 10-foot elevation?

A. Yes, sir.

Q. And you didn't rely on the cap to restrain the flow?

A. Not necessarily; no, sir.

Q. What became of that water that ran into the Stowell well ~~from the~~ after the tunnel reached it, in the winter time? Was it being used for irrigation at that time of the year?

A. I think so. I think they used all the water those years.

Q. In the winter as well as the summer?

A. Yes, sir.

Q. 1901?

A. I believe it was a pretty wet winter but I think they used it all.

Q. About that Hellman Well No. 2, did you superintend

the putting down of that well?

A. Yes, sir.

Q. Do you know whether the casing of the well was perforated so as to allow the increase of water?

A. Yes, sir.

Q. Do you know at what depth below the surface?

A. I don't remember.

Q. Was it perforated more than once?

A. Oh, yes; all the water bearing strata-- deep ones-- were perforated.

Q. You mention in the log of that well that for about forty feet or such a matter there was heavy gravel. Do you mean boulders?

A. No; coarse gravel; the size of one's fist.

Q. Is that water bearing gravel?

A. Not necessarily.

Q. Do you remember whether the wells stopped in water bearing materials or in dry material?

A. I don't remember.

Q. What was the diameter of the Stowell well?

A. The first 100 feet was 12 inch; after that it was reduced to seven-inch.

Q. Seven inches where it intersected the tunnel?

A. Yes, sir.

Q. Seven inches all the way down, from the tunnel down?

A. Yes, sir.

Re-Cross Examination.

Mr. Chapman: Q. When Mr. Finkle was there in March, '99, was there a well then connected with this Eady Tunnel?

A The'96 wells? No.

Q. Any well connected with the Eady Tunnel?

A. Oh, yes.

Q. Where was that?

A. I think well no. 9 was connected in. And there was a well in the shaft at that time.

Q. And what well was that?

A. I think No. 7.

Q. Who sunk that well?

A. I had them sunk.

Q. By what company?

A. Anderson sunk two wells there.--

Q. I mean by what company was he employed?

A. The Cucamonga Fruit Land Company. All thewells sunk on the west side and outside of the 90-acre tract were sunk by the Cucamonga Fruit Land Company except the last end of well no. 14, which the Ontario Power Company paid for.

Q. Did they sink the last end of the well or did they make a connection?

A. They took it over before the work was finished.

Q. How deep was the well when they took it over?

A. I don't remember.

Q. Was it as deep as the level of the tunnel?

A. Oh, yes.

Q. And a good deal deeper?

A. Oh, yes; it was practically completed.

Q. Now this siphon in well no. 4 or the Stowell well, did you have any apparatus in that by which the siphon could be regulated?

A. Yes, sir.

Q. What was it?

A. An air vent in the top of it.

Q. You gave the measurement of that water?

A. At one particular date.

Q. Did you measure it at any other date or time?

A. Yes, sir.

Q. It varied considerably?

A. Yes, sir; sometimes it ran by gravity and sometimes it would be 20 feet down in thewell.

Q. The cut in the pipe was about ten feet below the surface?

A. Yes, sir.

Q. Did you ever cut it any lower?

A. No, sir; not till it was cut off in the tunnel.

Q. I mean before it was cut off in the tunnel, when you lowered it 20 feet you didit by means of the siphon?

A. Yes, sir.

Q. How deep in the well did the siphon extend?

A. About 25 or 30 feet, I suppose; one joint of pipe.

Q. Below where it was cut off or below the top of the ground?

A. Below the cut.

Q. When this water was siphoned into that tunnel what use was made of that water and by whom?

A. Part of it went to Ontario. I sold the water at Ontario.

Q. That is the 30 inches that you sold?

A. Yes, sir.

Q. And what was done with the rest of the water?

A. It went to the Cucamonga Water Company.

Q. How much?

A. Probably 20 inches.

Q. No more?

A. After it was cut offin the tunnel there was more than that.

Q. I mean before it was cut off in the tunnel.

A. I can't tell how it was divided. I don't remember. You might find it in that old testimony. It was all worked over there at that time. In the McPherson case.

Q. But you don't remember?

A. No, sir; I haven't the memoranda here.

Q. The amount that went to the west side was 30 inches, and you don't know what amount went to the Cucamonga Water Company?

A. No, sir.

Q. How were they getting it?

A. It went through the tunnel.

Q. But from whom did they get it? You rented it?

A. No.

Q. How did the Cucamonga Water Company obtain the water that the Fruit Land Company developed?

A. It went into their system-- into their pipe system.

Q. Under what arrangements with the Fruit Land Company?

A. No arrangement whatever.

Q. Didn't you lease it to the Cucamonga Water Company?

A. No, sir.

Q. Did the Cucamonga Fruit Land Company lease it to the Cucamonga Water Company?

A I did lease them another 30 inches that I had.

Q. Whereabouts?

A. I had 30 inches that belonged to the Townsite. South Cucamonga. 30.8. I rented that.

Q. Where did that come from?

A. It was part of the system.

Q. But from what particular source did it come?

A. Any water that was under the control of the Cucamonga Water Company.

Q. They had all the water that came from this Eddy Tunnel except this 30 inches that you had sold to the San Antonio?

A. Yes, sir.

Q. They had about 30 inches besides that which you did lease them: Where did that 20 inches come from,--

A. I didn't speak of 20 inches.

Q. 30.

A. 30.8 inches of water.

Q. Where did that come from?

A. It came from anywhere where the Cucamonga Water Company had waterl, on the east side, north side, west side, or Lone Star.

The Court: Q. Was it represented by stock in the company?

A. It was represented by actual deed of the water given a great many years ago.that went to South CucamongaTow site, and I got it from them and afterwards exchanged it for water stock in the Cucamonga Water Company-- part of it.

There is one correction I wish to make. I read over the evidence or transcript and it seems that I said that I had no interest in theCucamonga Water Company. I have some stock in that company, and also in the San Antonio Water Company.

Q. Now?

A. Yes, sir; about two-thirds as much in the Cucamonga as I have in the San Antonio.

Q. You don't hold any office in the Cucamonga Water Company now?

A. No, sir. That is what I had in mind when you asked the question.

Q. Do you remember testifying in the McPherson case to the following effect:

"Q. You stated on cross examination that you would find out from your record the terms of the lease to the San Antonio people, as to leasing 20 inches of water. Have you got that record now? A. I can give you the amount. During '98 I rented 60 inches of water for which I received $2100.00.

Q. For how long?

A. For the season.

Q. To whom did you rent that? A. I rented part of it to the San Antonio Water Company and part of it to the Cucamonga Water Company.

Q. How much did you rent to the San Antonio Water Company?

A. The exact amount I can't figure up. It ran by meter.

Q. Couldn't you approximate it?

A. It was approximately 25 inches.

Q. How much did the San Antonio Water Company agree to pay you for that 20 inches of water?

A. For what they had in '98 I got $25 per month per inch. What the Water Company paid me was $10 per inch per annum for what they had.

Q. What water company do you mean?

A. The Cucamonga Water Company.

Q. The San Antonio Water Company paid you $25 per inch per month?

A. Yes, sir; for 30 inches, as near as I could make it.

Q. They took the balance that the Cucamonga Water Company didn't get out of the 60 inches? A. They took the balance

of the 60 inches from the Cucamonga Water Company, did they?

A. They took the balance which the Cucamonga Water Company didn't take and the North Ontario Domestic supply didn't take.

Q. Where did the ~~xxxxxxx xxxxxxx xxxxxx~~ balance come from?

A. It was what was left of the 60 inches ~~xx xxxx~~ that I had at that time.

Q. I asked you where it came from. I didn't ask you what you had, but where did that water come from?

A. The sources, do you mean?

A. Yes, sir.

A. It came from the '96 well and the west side of the Hill.

Q. What portion of the west side of the Hill?

A. 30 inches of it was water which I received ~~from~~ under that deed from the Land Company ~~or~~ to the Water Company, and the other 30 inches was what I was entitled to from the '96 well.

Q. The deed from the Land Company to the Water Company? Do you mean that 40 inches? A. No; there is a Class D, if I remember right, and under that deed there is 30 inches of water which I had at that time." Do you remember so testifying?

A. That is just what I have been testifying now. I remember testifying that I had 30.8 inches of water in the D classification of that deed, and 30 inches that I purchased from the Fruit Land Company for paying for the work that I had done and the money advanced.

Q. You agreed to take so much per inch of water developed?

A. Yes, sir.

Q. At $600 an inch?

A. That is right. I had $18,000, and I took 30 inches.

Q. That is the work you did of putting the Eddy Tunnel in repair and extending it and boring the walls?

A. Yes, sir.

Q: And you got 30 inches of water as your compensation in doing that?

A. Yes, sir.

Q. That is the water you sold to the San Antonio Water Company?

A. It might have been that or the other 30, but it was part of the 60.8 which I controlled at that time.

Q. At any rate, in the testimony which I have just read, you have given the correct statement of where the water came from that you were there speaking of, both that which the Cucamonga Water Company got and that which the San Antonio Water Company got?

A. No doubt of it.

Mr. Haskell: Q. Can you tell us approximately how much water came from the Eddy Tunnel at the time there was 30 inches being delivered to Ontario as you have testified?

A. There is records up there that will show it-- on that exhibit.

-o-

The Court takes a recess until to-morrow, Jan. 24, 190[illegible], at ten o'clock A. M.

----ooo----

DEFENDANT.

IN THE

Superior Court

OF THE

County of San Bernardino

State of California

Cucamonga Vineyard Co., Plaintiff	)	Vol. XIV.
vs.		
San Antonio Water Co., Defendant	)	

INDEX.

I. BENJAMIN, Official Reporter

January 24, 1906. Fourteenth Day.

GERVAISE PURCELL.

Gervaise Purcell, a witness produced by the plaintiff, being first duly sworn, testified as follows:

DIRECT EXAMINATION:

MR. BRITT: Q What is your profession or occupation?

A Civil and hydraulic engineer.

Q What is the length of your experience in the practice of that profession? A About thirty-five years.

Q And in a general way what has been your lines of professional practice in the way of water manifestations and water developments?

A It covers everything in relation to those matters, water developments, projections of water systems, investigation of supplies and the determination of their permanency, and all matters pertaining to the use of water for domestic and irrigation purposes and power.

Q Have you had any term of service or period of extended service in the line of your profession here in Southern California?

A Yes sir: I have been here since 1880. And from '87 on I think I practiced exclusively in hydraulics, except an occasional excursion in other branches of the profession. I have been employed by almost every water company in Southern California---the larger water companies, and anyway including the Lake Hemet, the Little Creek, the North Fork Ditch, the Cucamonga Water Company, the Pomona---the city of Pomona--the city of Pasadena, the city of Alhambra, the city of Los

Angeles and quite a number of others that I don't exactly remember at the present moment.

Q State whether the practice of your profession has involved the investigation of the source of water supply and the cause of the disappearance of water in this, that or the other localities.

A That is essentially one of the most important points that are put up to us---the permanency of the supply, its possible disappearance and the possible causes that may cause that disappearance, and in some cases I have investigated whether that result has occurred by their being affected by other improvements, and I have given an opinion as to the cause of the disturbance, whatever it was. I might also add that I have acted for the Corona Water Company, the Temescal Water Company and some of the others in that direction, the Santa Ana, and I am now consulting engineer of the Santa Ana Valley Irrigation Company and the Anaheim Union Water Company.

Q State whether or not you have been accustomed to render opinions in the course of your professional employment on these various subjects which I have indicated to you in the course of these questions.

A Yes sir; I do that constantly.

Q State whether or not you consider yourself competent to render an opinion on the origin, the flow, the surface manifestation and the causes of the disappearance of water in the locality of this part of Southern California.

A I believe I am, judging from the satisfaction expressed by my clients during my professional career. I think I

am, satisfied that I am.

Q Do you know this locality known as the Red Hill in the neighborhood of the Cucamonga Creek in San Bernardino County?

A I have known that country for quite a long time, and I have known it intimately since 1897.

Q Do you know the situation of the Cucamonga Canyon---known as the Cucamonga Canyon---and the Cucamonga Creek on the east side of the Red Hill and the other surface water manifestations and the streams issuing from it called the Cucamonga Springs?

A Yes sir. I have seen them very many times in the last seven or eight years.

Q Have you examined the territory in that immediate vicinity very much?

A Yes sir. I have measured the water personally in conjunction with Mr. Koebig and Mr. Wright, and I had it for some years constantly measured by Mr. Frederick V. Reid who I sent there, and at intermittent times we investigated the matter and felt sure this work was correct.

Q Do you know the range of mountains called the Sierra Madre range?

A I do.

Q Where is it situated with reference to the Cucamonga Springs?

A It is situated, generally speaking, northerly.

Q What is the trend of that range of mountains?

A Northeasterly somewhat; pretty near easterly and westerly.

Q And about how far north from these Springs is this range

of mountains?

A About five or six miles, depending on the point you start from.

Q What is the slope of the surface of the ground between the foot of the range and the Cucamonga Springs?

A The slope is about 150 feet to the mile, as I recollect it.

Q And in which direction is the slope?

A Generally speaking it is southerly and slightly southeasterly besides.

Q Do you know what is the nature of the material and the surface of the ground as well as the material at some considerable distance below the surface of this slope?

A Yes sir. It is an alluvial deposit. The plainis filled, caused by the denudation of the mountains north of it.

Q What is the character of the material without going into the geological or chemical character of it, but what is the character of it?

A Gravel, boulders, sand, silt, and I don't know of there anything else. There is no evidence of there being anything else.

Q What is the character of the range immediately to the north of the Cucamonga Springs with reference to steepness?

A It is very steep. You mean the Sierra Madres?

Q Yes.

A It is a very steep slope, the one facing this way---facing the ocean.

Q That is the southerly escarpment of the range?

A The southerly escarpment of the range, yes sir.

Q What have you to say as to the nature of this material between the foot of the mountains and the Cucamonga Springs relative to its permeability to water?

A It is quite porous. It is more porous in some portions than in others, as these fills always are. Some places it is very porous and some places much less so.

Q Have you observed anything of the surface channels along this slope, from the foot of the mountains to the Cucamonga Springs?

A I have.

Q What is the nature and character of the channels there as to being shifting or fixed, whether they are few or numerous, and whether they are deep or shallow?

A As they start out from the mountains they are pretty deep and generally consist of about one channel. As they get further down this channel separates up into a number, forming a delta of smaller channels, these representing themselves as some fan-shape spreads or fan-shape conditions, or what might be represented by your wrist and the fingers of your hand.

Q Have you observed personally as to which channel there is the principal conduit of water flowing from the mountains in the neighborhood of the Cucamonga Springs?

A You mean the immediate start from the mountains?

Q Yes. The larger channel at the foot of the mountain range.

A Yes. The largest channel there is the Cucamonga Creek itself.

Q What does this come from?

A It comes from the Sierra Mountains direct and has a southerly trend and some parts southeasterly as it gets further down.

Q Are there any smaller canyons in the neighborhood, the waters of which debouch into this neighborhood?

A Yes. There are some canyons further east. There is Deer Canyon that adds a quantity of water to the saturated mass below.

Q What have you noticed as to the disappearance of the water coming down from these canyons onto the sloping ground that you mentioned at the foot of the range, whether it disappears at all, and the country or district within which it disappears?

A I studied that very carefully and I came to the conclusion that the absorptive properties of that plain were so great that from the flood waters that I observed they don't go very far before the run-off was entirely absorbed or taken into the ground. I might mention one particular instance in which I think you were a party, Judge Britt. If my recollection is right, it was in the first week in March, 1905. We were there with Mr. O'Melveny and Mr. Wright, and you were there and I was there, and there was a flow coming out of the Cucamonga Creek. The amount I don't know, because we didn't measure it. But it was about fifty feet wide and possibly two and a half or three feet or even more deep as it debouched from the mountains, and when we got down to the Red Hills it had almost disappeared, although there was still a small amount of water passing down the east channel and some down the west one.

Q What about the velocity of the flow at the mouth of the canyon?

A It is very great, as might be expected, because the grade is very high. That would represent quite a large amount of water. We went there on account of there being a heavy rain previously and it was the wish of all parties to see the conditions that would result from the expected flood.

Q During the time that you have observed this country, where does the principal surface channel from the mouth of the Cucamonga Canyon run over the surface sloping plain that you have described, relative to the Red Hill which has been a good deal talked of in this case?

A Sometimes down the west side and sometimes down the east, and sometimes both of them. There are channels on both sides. I might mention that a tour of the country shows that there is very little difference in the elevation of those two channels.

Q Do you know of any surface manifestations of water at the Cucamonga Springs within the period of your own observations?

A I remember in 1900, I think it was, or the latter end of 1899, there were sienegas there on the Red Hill through producing water.

Q Do you know anything about the flow of water in the Creek on the east side of Red Hill at that time?

A No; I did not make a very careful examination of the amount of water at that time on the east side. I was more interested in knowing the condition of things on the west

side.

Q Do you know what afterwards became of the surface appearance of water on Cucamonga Springs on the east side of the Red Hill from personal observation?

A The cienegas are dried up or have disappeared.

Q Some years later?

A In 1904, 5 and 6 and along there, and I think back as early as the early part of January, 1904, or the spring of 1904 I noticed it disappear to a large extent. I measured the water constantly from the cienegas on the east side, either directly myself or through the instrumentality of a party that we maintained there for that purpose, and the flow of those cienegas was always getting smaller and smaller, and it got down to as low as three inches and I have the measurements.

Q Are you acquainted with the situation of the string of wells 200 feet north of Base Line and designated in the course of this evidence, commencing on the west, as one, two, three, four, five, six, seven and eight, which in some years have been pumped by the San Antonio Water Company?

A I am very well acquainted with them, and I have measured the flow of same personally myself.

Q Do you know their situation relative to the Cucamonga Springs? A I do.

Q You are acquainted with the situation of the tunnel on the west side of the Red Hill known as the Eady Tunnel?

A Yes. I measured the water out of that also over weirs known as number one and number two in this case.

Q Do you know the location of the well called the Stowell

well on the west side of the Red Hill and also the well designated here as No. 14 at the end of the Eady tunnel at present?

A Yes, I know the location of both these wells.

Q State whether you have examined the condition of these wells at the tunnel with reference to the Cucamonga Springs and the neighboring topographical features.

A Very carefully.

Q You said you had made some measurements personally and through the agency of other parties of the water issuing from the Eady Tunnel?

A Yes sir, over weir number one and two.

Q Have you made any study of the data contained in the plan, map or chart or tabulation offered in evidence as plaintiff's exhibit three?

A Yes sir.

Q Lookat this chart or profile now shown you and state what it is.

A It is a profile and has written on it "Cucamonga Water Flowing from the Mouth of West Side Tunnel." That doesn't refer to the ownership, but the water coming from the range, being over weirs number one and two. Those are measurements by Wright, Purcell, Goehig, Reid, Marsh, Saunders, Trask and Johnson.

Q State whether or not this is compiled from exhibit three.

A Yes sir. It coincides with---everything found on this will be found on exhibit three. We plotted graphically this one so as to satisfy ourselves of the effect on the discharge of tunnel No. 2 or the west side tunnel.

Q Is that the same as the Eady Tunnel?

A That is the same thing as the Eady Tunnel , and of the pumping above Base Line, and that is the result.

Q When you speak of pumping above Base Line, what particular pumping do you refer to?

A I mean the pumping of wells one, two, three, four, five and six, either as a whole or in portion. As that pumping is indicated on the chart exhibit three---as it is exhibited on the tabulation exhibit three. We started in here on January 1?, 1904, and I took the height of water at that time. They had just commenced pumping and I filed daily measurements during that year and the corresponding year up to January, 1905---

M. CHAPMAN: Q What do you mean by the corresponding year?

A The following year. Did I say corresponding? Well, I remember down to December 1?, 1904, when they stopped pumping, and the water flowed during that period down to its lowest point.

Q Indicated by the broken line on this profile?

A Yes. Then they stopped pumping and the water began to resume its previous elevation, although it never arrived at its same height as before. Then these wells commenced pumping on August 1?, 1905, and the same conditions or thing occurred as the result of that pumping and the amount of water flowing from those two wells became less and less, as is demonstrated by this chart. The last is here is November 5, 1905---then our assistant Mr. Reid did not make any more measurements. There were occasional measurements that we made ourselves afterwards which don't show on this chart.

MR. SMITH: We offer this plat, chart, diagram or profile in evidence, to be marked as plaintiff's exhibit sixty.

Q Now Mr. Purcell, from your observations there and the study of these measurements, what conclusion did you deduce, if any, as to the effect on the water discharge from the tunnel by pumping wells north of Base Line---the string of wells including the Haskell well and wells number two and three and others?

A There is a direct sympathy between the two. The pumping of the wells you have mentioned and the outflow coming through weirs number one and two in the Eady Tunnel.

Q When you say direct sympathy, what do you mean?

A I mean when you withdraw water by means of wells pumped above Base Line, you are lessening the flow from the Eady tunnel, and if you stop it you increase it.

Q Why is that your opinion?

A The facts show it.

Q No, what I want, is the fact of the diminution of water discharged from the tunnel produced by taking water by means of pumping from the wells?

A I would say that the pumping of wells reduced the entry head, and in that way reduces the pressure and diminishes the flow.

Q How is that reduction of head made effective, the wells being located some 1500 feet or more to the north of the head of the Eady tunnel?

A It is made effective by the action of the water, being in touch all through that 1500 feet more or less.

Q Would you know about the hydraulic grade, if any in that

locality, between the wells north of Base Line and the height of the Eady tunnel?

A North of Base Line they are higher than in the wells in the Eady tunnel.

Q Assuming, as has appeared in the evidence here, that previous to 1904 on the east side of the Red Hill there was surface appearances of water in Cucamonga Creek, flowing on the east side to the sienegas and the Y tunnel---you know where the Y tunnel is situated?

A Yes, I am quite well acquainted with it.

Q ---that there was a considerable stream flowing on the east side of the Red Hill, considerable quantities of water flowing from those sienegas, a large area of moist land on the east side of the Red Hill, a somewhat extensive discharge of water from the Y tunnel, and assuming that that water will frequently dry up in the Creek and in the sienegas and in the tunnel on the east side of the Red Hill, and that it disappeared after those wells north of Base Line began to be pumped: in view of the testimony which you have given here, what is your judgment and opinion as to the effect if any in producing such disappearance of water on the east side of the Red Hill by the abstraction of water by means of pumping from the wells north of Base Line?

A Taking all those elements into consideration, and from my knowledge of the condition of things there, and from my own personal observation---

MR. CHAPMAN: We move to strike out that portion of the witness's answer. We want to know what his opinion is founded on.

THE COURT: I think that is right. So far as it is covered by the question his opinion is all right; but counsel are entitled to know the basis of the opinion.

A I would say that the pumping of those wells north of Base Line was one of the elements which tended to diminish that water.

Q For what reason?

A In my investigations, and in the investigations of my associates with me, which we have platted and put in here before this court in exhibit three, it shows a sympathy between the pumping of those wells and the east side.

MR. GREGG: I move to strike out that part of the witness's testimony which says "and my associates." I think the opinion of the witness should be his own opinion and not the opinion of others.

MR. BRITT: I think his statement was relative to observations recorded here.

THE COURT: Taking those figures reported by himself and others, assuming those to be facts, that is what he bases his opinion on.

MR. GREGG: If that is so I have no objection. I thought he was bringing in the opinion of associates.

A I think I referred to exhibit number three.

MR. CHAPMAN: Before you proceed, let me ask you. In this last opinion that you have expressed you are not stating that is your opinion from the hypothetical question put to you by Mr. Britt?

A It is hard to disassociate one from the other---your own personal knowledge from the opinion that you would have had

if you did not have that knowledge. But if you want me to answer---

Q You are asked your opinion on a certain state of facts given by Mr. Britt. As I understand you you have given the opinion that the pumping of wells did have some effect on the east side, but you don't base it on the hypothetical question but do on your personal knowledge and personal investigations in those directions.

A I don't think my answer would hardly bear that construction.

MR. CHAPMAN: The witness introduced a particularly general sweeping assertion that includes his personal knowledge and his personal investigation, which we know nothing about and don't know what the facts are in his mind that really govern his opinion.

THE COURT: Your opinion is called for based on the data in exhibit three. The mere fact that you did something in taking those measurements cuts no figure. It would be the same if it was taken by somebody independent from yourself. But assuming those matters to be facts, what is your opinion?

A My opinion is that the pumping of those wells north of Base Line is one of the prime factors that tends to make the water disappear on the east side.

MR. BRITT: Q I would like to know the reason why you think the pumping there affects the appearance of water lower down in the depression and at Cucamonga Creek.

A I don't think I exactly put that.

Q Why does the pumping of water in the Haskell well, that simply, affect the water in the Sienega or in the Cucamonga

Creek or on the east side of the Red Hill?

A For the same reason as it does in the Eady tunnel. It was lowered further down and reduced the head and therefore reduced the discharge.

Q How is the reduction of head in the upper locality made operative in the lower locality?

A Because it brings the saturated plain below the previous point of exit. The water does not discharge there any more.

Q Could there be any sympathy of the water, between the water in the one locality and the other unless there was some contact or means of transmitting the pressure?

A There could not.

Q What is your view of the continuity of underground water there if any?

A The underground water is in continuous touch all the way through.

Q What is your view as to the permeability of the material between the string of wells north of Base Line and that where the Cucamonga Springs appeared, so as to permit the movement of water?

A I would say that there was a free permeability that enabled the water to flow down in that direction with probably more facility than it would in any other direction except the west side---

Q. What is your view as to the similarity between the east and west side of the Red Hill-- the expressions, I mean, east and west of the Red Hill, both on the surface and underground, so far as that similarity relates to the underground water in the neighborhood of the string of wells north of Base Line, and that east and west of the Red Hill?

A. The conditions are almost identical on both sides as to elevation of the surface of the ground, and I am of the opinion that the material is similar in all respects.

Q. Then, if I understand you, your view is substantially that there is an accumulation of water in that locality which south of the string of wells north of Base Line, pumped by the San Antonio Water Company, forks at the Red Hill?

A. The greater permeability of conditions forks with the Red Hill, and the west side channel and the east side channel are more permeable than any portion of the territory there. Therefore, the accumulation of water in the neighborhood of those wells would be drained off through that direction, either the east channel or the west channel, with greater facility than any other place

Q. From your examination of the conditions to which you have testified here, what is your view as to the origin of the water appearing in the Cucamonga Springs or which formerly appeared in the Cucamonga Springs, relative to the water shed of Cucamonga Creek and the adjacent mountain shed? Is there any connection between them?

A. There is a direct connection between the run-off from that water shed when it debouches on to the gravels below, and

and the rains on those gravels immediately, are absorbed, and tend to percolate and ooze and seep in a southerly direction till they get down towards the Red Hill where there is somewhat of a change of grade, making the velocity slower, and it makes an accumulation.

Q. What do you think about the effect of the Stowell well, for instance, which discharges into the Eady Tunnel, the water in the same rising from a depth of some several hundred feet (I believe above 500 feet) and the volume of water probably originally 100 inches or so,-- what do you think would be the effect, if any, of such a well as that (you have stated that you know what its locality is) on the surface manifestations of water east of the Red Hill, the creek, the cienegas and the Y Tunnel?

A. It is my opinion that well no. 4, known as the Stowell well, has a tendency to reduce the amounts of water appearing on the surface of the east side channel as well as the west side.

Q. For What reasons?

A. It reduces the plane of saturation and the elevation of it, quickens the grade and gives a freer discharge, and by that means it succeeds in lowering the water.

Q. What do you think about the effect of Well No. 14 at the head of the Eady Tunnel which, according to the evidence, discharges a good deal more water than the Stowell well?

A. It would be in proportion to the size of the well and the greater depth. The well is 16 inches, reduced to 12, as Mr. Stowell testified, and also well no. 4 is 7 inches. Consequently, the damage done by well no. 14 would, I presume,

be very much greater than that done by well No. 4.

Q In what way does such an abstraction of water in that locality operate to reduce the water on the east side of the hill?

A By reducing the general plane of saturation north of the Red Hill; and there may be a possible percolation even under that Red Hill, and I am not prepared to say there is not.

THE COURT: Q Is there a crown of springs around the Red Hill?

A On the southerly side just below the summit. That may come from a higher source, and there may be a closer strata which would not show a connection, and there may be a looser strata below that again. That is what made me make that reservation in my answer.

M. DUITT: Q What is the effect of tapping any water bearing stratum on the rapidity of the movement of water?

A It gives a freer vent and generally clears out a good deal of the silt in the interstices below and enables the water to come out in a larger amount than passed through previously under the action of nature.

Q What is the effect of boring or sinking a well into water bearing strata from which the water discharges through that well, on the hydraulic plane in the immediate neighborhood of the well?

A It will undoubtedly lower it; but the exact distance it will lower it to depends on the porosity of the material. In some cases I have in mind, and it has come under my personal observation, that it has been quite a distance; and if the material is rather close so that the velocity of the

underground flow is slow, the effect will not be felt immediately or with such rapidity as where the porosity is great, and consequently it might not be supposed that it didn't affect it to any great extent. But in reality I think the effect of boring all those wells is detrimental to a very great distance.

Q You think it extends to the Cucamonga Springs?

A I am of that opinion. From the evidence in this case it extends to the Cucamonga Springs.

Q I call your attention to this tabulation, exhibit 11. I will ask you first if you are acquainted with the location of Hellman well No. 3?

A Yes sir, I am familiar with it. It is the top of the west side, or the top of the west fork of the Y tunnel.

Q Artesian well No. 2?

A That is on the west side, and about thirty feet in elevation above it, and easterly of those shafts where the No. 4 and 4-A weirs are.

Q You say it is on the west side of what?

A On the west side of the Red Hill. It shows here on the face of exhibit No. 1. It is pretty well on the line of what is known as the 20-acre tract---on the north line---and pretty near the center of it.

Q The evidence tends to show here that these wells north of Base Line---the San Antonio Company's string of wells---was not pumped last year (the season of 1907) until some time in September, and that then some of those wells were pumped, as indicated on plaintiff's exhibit 11, and the figures on this exhibit 11 show that almost immediately on

the pumping of those wells the height of the water in the Hellman well No. 2 and also in the Artesian well No. 2 began to decline and did decline. What if any indication does that offer to you of any effect or any relation of cause and effect, taken into consideration with the topography of the country and the underground conditions which you have already described?

A It shows a direct sympathy between the water pumped from those wells---

MR. CHAPMAN: What wells now?

A The wells mentioned in his question. I am making my answer to correspond with the question. I mean the Lastfell well and those north, and the Hellman well No. 2. I would like to state here that water being practically an indestructible fluid, it is in touch all through where it is on a continuous line---it is in sympathy all the way through where it is in touch, and anything done on one end of it is quickly felt at the other one. Consequently, if you abstract the water from the higher portion by pumping the wells you find very quickly a subsidence of the water at the lower end.

Q I now call your attention to the circumstance of the subsidence of the water in the Hellman well No. 2, which is on the east side of the Red Hill, and in what we call the Cucamonga Springs here; that occurred simultaneously with the subsidence of water in Artesian well No. 2, which is on the west side. State whether that tends to indicate any connection between the water on the two sides of the Red Hill.

A Yes sir. The same reasons in my last answer would show that they are in direct sympathy and in direct touch

all the way through. It is practically the same water.

Q Referring again to exhibit 11, I will ask you and in when the pumping ceased north of Base Line then the water rose again in Hellman well No. 2 and Artesian well No. 2. Does that circumstance afford any corroboration of the fact you stated a moment ago?

A If my opinion as stated a moment ago is correct, it is exactly what would occur; and if it did occur I would feel more firm in that opinion.

Q State if you have made any examination of this exhibit three with reference to measurements on Artesian well No. 2 and the Hellman well No. 2, and the correspondence or rather the relation of the rise and fall of the water in these two wells to the pumping of water from the San Antonio Company's wells north of Base Line?

A Yes; I have made such observations.

Q State now whether the result of your examination of the data shown on this exhibit three is graphically illustrated in this exhibit 50, and state how and in what manner.

A Yes. This is a graphical portrayal of the data in plaintiff's exhibit three. It shows the effect on those two wells in rising or lowering of water according as those wells above Base Line are pumped or not pumped.

Q I would like you to describe what you mean.

A Now in this exhibit 50, made from the measurements of Messrs. Purnell, Wright, Koebig, Trask, Marsh and Reid, and all of which appears on plaintiff's exhibit three, it will be found that as soon as the wells of the defendant (or, we will say, the wells north of Base Line) are pumped, that

there is a subsidence of the water in both these wells, this being Artesian well No. 2 at the top of this exhibit, and Hellman well No. 2 at the bottom. And when the source which we call the San Antonio Water Company's wells stopped pumping in January, 1905, the water began to raise immediately, very rapidly until it found its highest point on May 11, 1905. Then there was not during the next three days any observations made, owing to the death of a near relative of Mr. Reid, and there was a sudden drop in that well, which I account for by the fact that the well is about 500 feet deep, as I am informed, and it is cut in many places to let the water in. During the seasons of the dry years, when it was low, the strata being dry, these silts were probably tacked tightly so that the water didn't get through them. As soon as it got to such a height and such flows having thoroughly saturated these little obstructions and forced them out, and it went into the surrounding dry strata and continued to wet them, as evidenced by subsequent elevations which maintained themselves pretty well at the same height, until we come to August 1, 1905, when the San Antonio wells commenced to pump again. Then it commenced steadily to go down, and at the date of November 7, 1905, when they ceased pumping the elevations in both these wells immediately commenced to come up again, although they never in either of them reached the highest elevation with which we started. We stopped our measurements then and we have a gap there, after which there is some information that we obtained in the year 1907 which shows that the water had continued to rise until it had almost come up to where it had originally started from, during which time there was no pumping to any

great amount done.

Q When there was any pumping done---

A There was a little pumping done in October and in the latter part of September, 1907, and immediately there was a sag then which, when the pump stopped on the 13th of October (an unlucky day) it commenced to come up till it reached its highest point at about the 30th of November, and then wells No. 2, 4 and 8 were pumping; but just when they commenced we do not know. And on December 8 there is a sag there showing the effects of the pumping.

Q Sag in what?

A In the surface line of the water of Hellman well No. 2 and Artesian well No. 2.

Q If there is such a connection between the pumping of the wells of the defendant and the two wells to which your attention has been directed in these last few questions--- the Hellman well No. 2 and the Artesian well No. 2---state whether there is any reason to suppose that there is not a similar connection between the pumping of the wells of the defendant north of Base Line and the water which appears by nature in the Cucamonga Springs, including the creek and sienegas.

A The inference would be that there is such an exactly similar connection.

CROSS EXAMINATION.

MR. CHAPMAN: Q I understood you to say that you had been making some investigations and some measurements in common with Mr. Wright?

A. In this locality?

Q Yes.

A Yes sir, with Mr. Wright and Mr. Kuebig.

Q What right did you refer to?

A E. T.

Q The hydraulic engineer?

A Yes sir; a well known engineer of Los Angeles.

Q ~~And he has had~~ And the same gentleman who has been on the witness stand here?

A Yes sir.

Q When were these investigations made by you in conjunction with Mr. Wright?

A Some time in the spring of 1904 we commenced on them and we continued them, I might say, up to date.

Q Up to what date?

A Up to a few days before coming into this court.

Q Was he with you during all these examinations and investigations that you were making in the year 1904 and 5?

A Pretty nearly so. There may have been a day or so that he was not, but I don't call it to mind.

Q When you were making these investigations in 1904 and 5, who was taking the observations and levels at the various wells and observing the pumping?

A During the time we were up there personally I took them myself, and my associates Mr. Wright and Mr. Kuebig, and our assistant Mr. Reid also took them.

Q Were you there every day during that time?

A No, but Mr. Reid was.

Q About how many days were you on the ground?

A I have never counted. I have the different measurements and dates and everything.

Q But you don't know about how many times ?

A No, I never made any count of it.

Q What was Mr. Reid's function in that investigation?

A To carry out our instructions.

Q What instructions did he have from you?

A To measure the same places that we measured, to record them and report to me weekly.

Q Measure what?

A The flows over the weirs that we had measured ourselves, and indicated to him, the depth of Artesian well No. 2 and Pelham well No. 2, and make a weekly report as to the results of his investigations.

Q What weir was he measuring?

A All the weirs on the west side, the weirs on the east side, the weirs of the wells above Base Line.

Q Did he measure over the weirs in the tunnel?

A He measured over the weirs in tunnel No. 2.

Q How many were there?

A Number one and two.

Q Were they close together?

A Yes sir; in the mouth of the tunnel.

Q Did he measure over both weirs?

A I presume so. His notes show it. They are here in exhibit No. 3.

Q And all of his measurements are on exhibit No. 3?

A Yes sir. That I know, because I have checked them over myself.

Q Where were those two weirs that you speak of---weirs one and two?

A Just now they are---

Q I mean then?

A At that time they were in the mouth of the Eady tunnel.

Q Were they side by side?

A No. There was one weir back about fifty feet.

Q What did those two weirs measure? What water?

A All the water that came through the Eady tunnel.

Q What did No. 1 measure different from what No. 2 measured?

A I only know that by hearsay. I have measured the weirs. They measure water coming out of the Eady tunnel.

Q Did it take the measure of both of those weirs to give the sum total?

A It took the two weirs to give the sum total.

Q And weir No. 1 measured what?

A The water coming from the Eady tunnel, diverted at that point.

Q And weir No. 2?

A The water coming from the Eady tunnel diverted at that point.

Q Why were the two separate?

A One was taken out before it came to the other.

Q Which one took it out before it came to the other?

A Weir No. 1 took water before weir No. 2.

Q Which one of these weirs belonged to the Cucamonga Water Company?

A I only know by hearsay.

Q Which one did you understand belonged to the Cucamonga Water Company?

A I think the one of the Cucamonga Water Company---

MR. WHITT: We object to that. I don't think it is material, and we have actual proof of it here.

THE COURT: The witness can specify where the measurement was taken.

Q Do you know what waters those two weirs were supposed to measure?

A It was not part of my employment to ascertain where those waters went to. All I know is by hearsay.

Q Do you know that there was another weir higher up in that tunnel?

A Yes sir.

Q Do you know to whom that weir belonged?

A Of my own personal knowledge I do not.

Q Do you know that one of those weirs was intended to measure the water into that tunnel from outside of the 90-acre tract? and the other the waters that came into the tunnel from waters in the 90-acre tract?

A I may have heard so.

Q Did you pay any attention to that fact in the measurement and in forming your opinion?

A No.

Q To what extent did the water of that tunnel fall off during the process of pumping these wells during that season of 1904 and 5?

A January 21, 1904, which is first mentioned on this plat and on exhibit No. 3, 35½ inches, after which the wells were pumped---

Q Was that the amount of water flowing in that tunnel?

A That is the amount of water flowing over weirs one and two. On January 5th, 1905, when they stopped pumping after a period of continuous from the former date, there was 171.33.

Q ~~Back~~ A difference of what?

A About 184 inches.

Q Out of a sum total of 355 inches. That was from January, 1904, to January 1905. Did you take any pains to ascertain whether the greater part of that falling off had taken place in the waters that came into that tunnel from outside of the 90-acre tract or inside?

A The waters which came from inside, as shown by the evidence introduced before this court amounted to from ten to eighteen inches. Therefore the larger portion of the water must have come from outside of the 90-acre tract.

Q You tell me what the evidence in this case shows. But I ask you if you took any pains yourself to ascertain.

A I couldn't do it, because the water was all mingled. There was no difference of appearance in the water north of the 90-acre tract from the other.

Q There was a weir in that tunnel for the division line between the waters that came from the 90-acre tract and from outside ?

A There was what is called the cement shaft. Is that what you allude to?

Q Yes. You didn't make any measurements in there for the purpose of ascertaining the fluctuations of the water coming from the outside of the 90-acre tract?

A We made some measurements, but not constant measurements, because, if I remember rightly, the San Antonio Company did

n't allow us, and we had a shaft somewhat south of it and on the 90-acre tract a few hundred feet south of that, that gave substantially the same information.

Q Did you note that on exhibit three or in eleven?

A Yes sir.

Q That exhibit shows the measurements at both places?

A Yes sir.

Q From what part of the evidence did you derive the information that the water from the 90-acre tract in that tunnel is only eleven inches?

A Mr. Stowell testified here that it was eighteen inches, if I remember correctly, and I think Mr. Stowell Wright in some of his tabulations and figures showed it.

Q What do your figures for those two weirs during that period show?

A They show that when the water was being pumped---

Q I mean about the quantities of water flowing from inside of the 90-acre tract and that outside. Does it show any such disproportion as that?

A I don't exactly get your question.

Q There are two weirs that you were measuring all the time, you or Mr. Reid, weirs No. one and two?

A Yes. And then we measured No. 4 and 4-A, which was in that shaft.

Q What measurements have you been talking about here when you were showing us the total output of that tunnel in January, 1904, as compared with that it was in 1905?

A Those were weirs numbers one and two near the mouth of the Eady tunnel.

Q That gives you the sum total flowing from that tunnel?

A Yes sir.

Q What was the proportion of the waters between weirs numbers one and two that were flowing at those respective dates?

A Exhibit number three would show it, but we have not segregated them.

Q We took one period in January, 1904, which, if I remember rightly was the fifth?

A It was the highest.

Q And that sum total was three hundred and what?

A Some 355.

Q And at that time of that 355 inches how much was coming over weir No. 1 and how much over weir No. 2?

A Over weir No. 1 116.9 inches and over weir No. 2 238.4 inches, and I quote from defendant's exhibit three.

Q At the corresponding date in 1905 what was the proportion?

A I don't think I gave you that date. I think it was January fifth.

Q Well, January fifth. That is when they ceased pumping?

A Weir No. 1 is 111.15 and weir No. 2 171.93.

Q How much did you say was flowing from both weirs in 1905 on January 5?

A 171.32.

Q Now will your exhibits 32 and 3 and 11 show the diminution of water from day to day or from measurement to measurement?

A Which exhibits?

Q Three and eleven are the data from which this diagram was constructed?

A Yes sir, that is perfectly correct.

Q And a reference to these exhibits will show a diminution of the water from day to day in that tunnel as this pumping progressed?

A That is correct. Everything that is on any of these profiles is on exhibit three, as far as I know.

Q Is there anything on exhibit three that is not on the profile?

A I think not.

Q Then I am correct in saying that this is nothing but a diagram constructed from the data on exhibit three, and intended to present to the eye the relations and flow of this water during that period of time?

THE COURT: You refer to exhibit 38 Mr. Chapman?

MR. CHAPMAN: Yes sir.

A Exhibit 38 is a visual representation of the figures on exhibit three.

Q And during the time these observations were going on, did you make observations of any other fact or phenomenon in that country other than these wells pumping north of Base Line?

A I made some measurements.

Q Did they enter into your consideration of this matter for the purpose of forming an opinion?

A Yes sir.

Q What other observations did you make?

A I made some measurements on the Lone Star.

Q How many?

A Quite a number I think. I went the round and made

them. I haven't got them exactly in my mind.

Q And are they on exhibit three?

A They are not, that I see.

Q Do you know about how many observations were made in the pumping operations in the Lone Star well and the amount of water flowing from the wells and tunnel known as the Lone Star wells and tunnel?

A Not at this particular moment.

Q Have you any idea?

A I could tell you how many observations I made. We usually found the amount coming from the Lone Star well was almost a fixed quantity.

Q I am asking for the number---

A The number of observations I don't know. I would have to go through the data.

Q Have you any idea?

A There was quite a considerable number.

Q You didn't go out there making daily observations of those wells and report the amount of water pumping from that part of the country?

A I am not prepared to say that Mr. Reid didn't make such observations, without reference to his notes. He had no instructions not to.

Q If he did make them they didn't appear on this exhibit 3?

A If he did make them, and if they are not on it, they don't appear there. I don't see anything on exhibit 3---

MR. BRITT: Q What are numbers four and five there?

A Some of those pumps were classified by number and some by name. Weir No. 4 is the bottom of the shaft in the Eddy tunnel.

Recess until ten o'clock

AFTERNOON SESSION:

(The witness Purcell is temporarily withdrawn from the stand.)

N. E. STOWELL.

N. E. Stowell, heretofore sworn and examined, being recalled by plaintiffs, testified as follows:

MR. WHITE: Q Mr. Stowell, is there any correction or modification or amplification of your testimony respecting the interview with Mr. Finkle, on which subject Judge Chapman questioned you yesterday, that you desire to make?

A Yes. I had confused the dates between the date of the trial of the McPherson case and the date of the purchase of that property. You asked me about the date of the purchase in '99 and 1900 when the McPherson case was tried, and I confused the date. At that time Mr. Finkle was down there and I showed him the elevations.

Q State what the difference is.

A He asked me if I didn't state to Mr. Finkle the relation between the shaft above Base Line and well No. 4. Of course, if he had asked me that question, I think it was a grave blunder in selling flowing water, on my part, if I didn't tell him that there was a synclinal that existed there. I don't think I could have used any more powerful argument than to show that it drained the country north of 16th street.

Q What time did that conversation occur between you and Mr. Finkle?

A The conversation that I thought he alluded to was just

before the other suit.

Q The trial of the McPherson case?

A Yes.

Q When was that?

A That was in 1900. Another correction I wish to make is about the temperature of the water. In the Stowell well the water was cold. I testified yesterday that it was a warm well. The warm well is number five and six. Those two wells were disagreeably warm to the taste, and was sulphur water, and it was not fresh and pure water like there was in the 36 well and in all the other wells.

Q Where are numbers five and six situated?

A The Lone Star wells. That water, when it ran into the reservoir would stagnate and get growths in it. No other water in that neighborhood would do that.

Q Now on the subject of the Lone Star wells and the Lone Star tunnel, and the wells on the 35-acre tract, you gave a number of measurements yesterday in answer to Judge Chapman's questions as to a certain weir: I inquire of you if you made those measurements of so-called Lone Star water and included all the water from the Lone Star tunnel and the wells on the 35-acre tract?

A The measurements which I gave of the Lone Star were of all the water that came from the tunnel and the two wells. The measurement that I gave of the south-side box was all the water that came from the tunnel and the several wells on the 35-acre tract.

Q Was the water from all these wells conducted through that tunnel?

A Yes sir.

Q Further, Mr. Stowell, on this subject of the sympathy of one well with another, in that sense did you use the term "sympathy" in saying that you didn't observe except on the 55-acre tract any sympathy of one well with another in that locality or in that neighborhood, or something to that effect?

A We tested that very thoroughly on the 55-acre tract. We pumped one well and we got practically the same amount of water that we did from all. When we pumped one down 20 feet the other wells immediately lowered in 24 hours to practically the same elevation. But any immediate sympathy, I have never observed in any other wells that it would affect any other well in any reasonable time that I was ever able to measure.

Q Do you mean to say that you observed no effect on the general water plane in the vicinity up there by either the pumping of any of those large wells or by taking water from them by means of tunnel and siphons?

A The water plain has been continually lowering ever since I commenced developing there down to the last of my being there in 1902.

Q That ~~xxxxxxxxxx~~ species of sympathy was not included in your statement?

A I call that a general decline of the water plane all over. I don't call that a particular sympathy between two wells.

MR. PASKELL: Q Did you take the temperature of a considerable number of those wells on the Red Hill at Tucumcari?

A Yes sir, all of them.

Q Did you find any two of them that had the same pempera-

ture?

A Yes; all of them.

Q Did you find any two of them that had the same temperature?

A Yes. The only marked exceptions are the two Lone Star wells. Those were warmer than 70 degrees. The others were between 68 and 70. The Lone Star tunnel was 64 a great deal of the time.

Q I am speaking about absolutely the same temperature. That is, within a half a degree.

A Oh, I think -- yes, I think they were the same.

Q How many wells varied?

A Not more than a couple of degrees usually.

Q Did you notice whether the warmer wells were the shallow or the deeper wells?

A The 96 well is a comparatively shallow well---420 feet---and the same temperature of others close there that are not as deep and some quite considerably deeper.

Q Which was the hottest well and where was it located?

A The Lone Star wells were the hot wells. Those were about 500 feet deep if I remember right.

Q And the Lone Star well is above Base Line?

A It is above Base Line on the Cucamonga Homestead Association tract.

MR. SMITH: He locates them in his previous testimony accurately.

A No. 6 is 479 feet deep. That was not a very warm well. And No. 5 was 541 feet deep. Those two wells and the Lone Star well had very much the most clay and the least water

gravel of any wells in the whole country there that I know of.

Q Did you find any wells with comparatively warm water near the west side?

A No sir.

MR. BRITT: Q That Artesian well No. 2, do you know the depth of that well?

A I don't know, except from recollection. I think it is 250 feet---here it is. 256 feet, well No. 2.

Q And the Neilson well, you gave the log of that yesterday. Have you got it there so that you can give us the depth of that exactly?

A Not without referring to my book. I think that was 500 even, or 600 even. I think it was a contract for so many even feet.

CROSS EXAMINATION.

MR. CHAPMAN: Q Since you left the stand yesterday have you been conversing with anybody on the subject of your testimony given here yesterday?

A No sir.

Q Nobody at all?

A No sir. I simply remarked as I came in to Judge Britt that there were one or two discrepancies that I would like to correct. I will say in excuse that I was very tired yesterday. I went to town the night before after court, and I tried to find the papers and datathat you wished and I worked on it and didn't get to bed till two o'clock in the morning. Then I got up before six and came here on a train that gets here at 9:40 (when it doesn't break down as it did that day) and then all afternoon I was reading those measurements with

a magnifying glass, and it made me very tired last night, and I wasn't very clear in my mind about what you were asking. I will say that in my examination I find that Mr. L. Ideson and George Bower were two of the parties working up there when that 96 well was cut, and I think their recollection will be very clear and positive about the facts.

Q When you speak of the 96 well that they cut, you are not speaking of the well that you put down in '96?

A I am talking about well No. 4, otherwise called the Stowell well.

Q That is the one you are talking about?

A Yes sir.

Q Who do you say were the persons working there then?

A L. Ideson and George Bower.

Q Where were they working?

A At well No. 4.

Q At your well?

A Yes sir.

Q But not in the shaft?

A No. I don't know the names of those, but they came to our well every day to get water to drink and we met them very often in that way.

Q You do remember to-day that you had a conversation with Mr. Finkle. Was not the secretary of the San Antonio Company, Mr. Shepherd, present in March '99?

A I don't remember that. I know that Shepherd was there and Locke was there and all those parties were there at different times, and I got from Mr. Finkle or Mr. Shepherd the measurements Mr. Finkle made there.

Q But you don't remember the conversation that you had?

A No sir.

Q And I understood you to say in your direct examination a while ago that you thought if you could have assured them that that well would drain that upper country it would have been a great inducement for them to take the property?

A I think so.

Q Do you know how the conversation came up between you about this matter?

A About what matter?

Q About the effect of the wells in that country, one over another?

A When? In '96?

Q In '99. You remember the time when the San Antonio Water Company purchased the right from the Cucamonga Fruit Land Company to develop water on a certain 52-acre tract of land?

A Yes sir.

Q When those negotiations were going on is the time that I am trying to call to your memory that you had a conversation with Mr. Finkle and Shepherd. Whether there was anyone present or not, those two were there, and they were both representing the San Antonio Water Company. I will ask you if they didn't ask you what you knew on that subject of how one well was affected by another.

A I don't remember any such conversation.

Q Don't you remember you were trying to get them to make a purchase of the right to develop water on a certain two and a half acre tract?

A Yes sir; thirty inches.

Q And don't you remember Mr. Finkle was there and in this conversation told you, in substance, that he was afraid that that was not sufficient area to protect the wells on the land which they might purchase, from wells which might be sunk by other people; and didn't you in that conversation tell him that a hundred feet was sufficient for the protection of a well there, and called his attention to two wells located within less than a hundred feet of another, and which you assured him neither affected the other?

A I think there is a mistake in the dates. I think they purchased that land before there were any wells bored there except the '96 well and wells one, two and three.

Q That wells one, two and three?

A The wells bored by John Lynch on the mesa.

Q Have you not yourself sunk two wells, well No. 4 being one of them, before March '96?

A No sir.

Q Was there not a well within a short distance of this well No. 4 at the time of that conversation?

A No sir, it couldn't be. It was nothered at that time to the best of my recollection.

Q Do you know as a matter of fact that the San Antonio Water Company refused to make the purchase of the right to develop on the two and a half acre tract and insisted on the right on the 53-acre tract?

A I know there was a lot of negotiations, but to attempt to relate any conversation in regard to buying or selling water or swapping dogs or horses eight or nine years ago, I don't know anything about it.

Q Wasn't a lot of the negotiations on that very subject had trying to get them to develop on the two and a half acres, and didn't they make inquiries and finally determine that they wouldn't purchase the right to develop on less than the 55-acre tract?

A The 55-acre tract didn't belong to me. The rights on the two-acre tract did belong to me and consequently I couldn't have had any negotiations about the 55-acre tract because I didn't own it.

Q You were an officer of the Cucamonga Fruit Land Company?

A In selling the thirty inches for them, there never was any proposition of the San Antonio Water Company to take any amount from the two acres except what belonged to me.

Q I am talking about the distinct right to develop water on the 55-acre tract. Did they not make such purchase from the Cucamonga Fruit Land Company?

A I should say not. I don't think they did, except through the Ontario Power Company.

Q Was the purchase made by the Ontario Power Company?

A The Ontario Power Company purchased the 55 acres.

Q Who were your negotiations with the Ontario Power Company at that time?

A Not at that time. It was not organized.

Q I am talking about March 15, 1899, and I will ask you again if on that date, as part of the same negotiations, if the people didn't ask you whether there wells on the north, of which you have been speaking, were or were not affected by, or whether they did or did not affect the wells on this tract of land for which they were negotiating?

MR. SMITH: Objected to as irrelevant, immaterial, and not

proper cross examination, and whether the witness gave utterance to such an opinion or not, it was merely a matter of opinion and not pertinent to any testimony that he has expressed in the present case.

THE COURT: I understand the question to exclude opinion.

MR. CHAPMAN: I hadn't finished the question when he interposed the objection.

Q (Continuing) And whether you did not in answer to an inquiry tell him that they did not have any effect, one on the other?

MR. CRITT: I renew the objection and submit that the question inquires of the witness whether he did not express at the time mentioned an opinion to those gentlemen on a certain subject.

THE COURT: It calls for an opinion, certainly; but if it calls for a fact I think it is permissible.

MR. CHAPMAN: I am asking the witness this question for the purposes of impeachment. He testified that in 1884 when he sunk this well No. 4, that when he cut that well ten feet below the surface that the water did go out of the shaft to the north, sunk by Franklin and Stamm. Now, if that is so, when he had that conversation in 1899 with Mr. Finkle and Shepherd (if he had such a one) this other experience had already taken place and he knew it or should have known it, and even if he expressed merely the opinion to Finkle that they didn't affect one another, that would not militate against the fact that the opinion was contrary to what he now says was the experience and fact in the matter.

THE COURT: The objection is overruled.

A I don't remember any such conversation. I am satisfied that it was not called to my attention in anyway that would allow me to answer that question the way I should have answered it, because I should have been only too glad to have mentioned that fact to them.

Q What I am trying to get before you is---I am assuming the fact. I don't know which one of you gentlemen tells me the exactly correct version of it. But the whole substance of it was that anterior to making any purchase Mr. Finkle was in the employ of the San Antonio Water Company; that he was there with you for the purpose of rendering an expert opinion to the gentlemen whom he was representing as to whether it would be safe to take the purchase and take from you that which you were ofering to sell, and that that was the reason he was making the inquiry.

A I don't recollect any such conversation.

Q Do you remember this well that was there---was that well No. 14 that was there at the time of this purchase of the property in 18[illegible]?

A Well No. 14 was not there in 18[illegible].

Q I mean No. 4.

A 4 was there in '[illegible].

Q Is that the well from which the 30 inches which you did sell to the San Antonio Water Company was to come?

A Yes sir.

Q And that was on this two and a half acre tract?

A It is on a two-acre tract.

Q I will ask you again if they were not attempting to guard against the possibility or probability of another

that another well sunk near there might deprive them of the 30 inches which they were purchasing?

A The 30-inch sale of water was not taken up till after the sale of the other water by the Fruit Land company.

Q To whom?

A To the San Antonio Water Company.

Q The San Antonio Water Company did in the month of April, 1889, purchase from the Cucamonga Fruit Land Company a right to develop I believe not to exceed 100 inches of water?

A I think something like that.

Q That was in April, 1889.

A I don't know the date.

Q At any rate, do you know whether that was before or after the purchase which the San Antonio Water Company had made of you individually of the 30 inches?

A The whole sale was consummated at the same time. The sale was first made of the larger quantity of the Fruit Land company and then they concluded to take mine too. I was indifferent whether they took it or not. The deed came for the whole matter at once.

Q Didn't you join in the deed?

A I joined in the deed, but I had no title to it except a verbal agreement.

Q But you were to get your pay for the work of getting these wells, in water at $200 an inch?

A Yes sir.

Q Did you get the thirty inches of water?

A Yes sir.

Q And you say the negotiations with you and with the

Cucamonga Fruit Land Company for the right to develop a hundred inches were concluded about the same time?

A The sale of the Fruit Land Company was consummated first, and the other was indifferent to me whether they took it or not.

Q Have you anything now to give us the dates when these transactions were consummated?

A I have nothing further back than November, 1899.

Q You mean earlier than that, don't you? It was in the spring that it was consummated?

A I say I have nothing previous to '99 in there data.

Q Let me invite your attention to this diagram exhibit No. 1 for a moment. Do you notice on this map a well marked 1897?

A That is well No. 7.

Q And dated 1897?

A Yes sir.

Q Did you sink that well?

A I did.

Q When did you complete it?

A I have no recollection of it. I think it was in '97.

Q That well was there when you had the conversation, if you had any conversation with Mr. Finke, in March 1899?

A Probably.

Q How far was that from well No. 4?

A About 300 feet.

Q What is the nearest well to well No. 7?

A Well No. 11.

Q How far distant is it?

A About a hundred feet.

Q And is that the shortest distance between any of these wells in that vicinity?

A It seems to be about 60 feet by the scale.

Q That is well No. 11?

A Yes sir.

Q When was that bored?

A In 1899.

Q What time?

A I couldn't tell without looking it up. On December 5th, '9, well No. 10 was being bored, so I judge it was bored after that date.

Q Do you infer it from the number?

A Yes sir.

Q You didn't make the numbers that are put on these exhibits?

A The numbers are the order in which the wells were bored.

Q How many wells were on the 90-acre tract at that time?

A Four.

Q Where were they and what are their numbers?

A No. 1, No. 2 and No. 3 and another well. That isn't numbered.

Q Thereabouts is it situated?

A And possibly well No. 10. That is situated in the part of the tunnel, south of the well numbered three on that map.

Q How many have been put on that 90-acre tract since?

A I think there has been two put on it since.

Q About where?

A Well No. 10 is on the 90-acre tract.
Q How deep?
A Well No. 10 is 606feet deep.
Q And No. 11 is how deep?
A No. 11 is 705 feet.
Q And No. 7?
A 370.
Q Were those wells all there at that time in '99?
A I don't think they were there in March '99, all of them; especially well No. 10.
Q Did you say there were five of them there at that time--- on the 90-acre tract?
A There was four that I know of, and possibly No. 10 was being bored.
Q ~~Before~~ The ~~four~~ fourth that you know of that ~~were~~ was there in March '99 and numbered that---No. 7?
A No. 7 is not on the 90-acre tract.
Q What are the four on the 90-acre tract?
A One, two, three and a well that is not numbered, and possibly No. 10.
Q What wells have been put there since?
A There has been a well put close to No. 3.
Q How deep?
A I don't know.
Q The next one?
A Bored between eleven and well No. 2.
Q Is No. 2 the Artesian well No. 2?
A Yes sir.
Q When was that put there---I mean the one between?
A I think about 1902.

Q Do you know how deep?

A No sir.

Q How many of these wells are connected with tunnel No. 2?

A I think all of them, except No. 2, is connected with the tunnel higher up. It is not connected clear down to the tunnel grade.

Q Artesian well No. 2 is not deep enough to reach the grade?

A Oh yes.

Q But it is not connected on the grade?

A No sir.

MR. STATES: Q How deep is No. 2?

A [illegible] foot.

MR. CHAPMAN: Q Are those all the wells that you know of on this 90-acre tract?

A Yes sir. There was the Tiburcio Spring well. That was only a few feet deep.

Q The water from that, whatever it is, is conducted into the tunnel also, isn't it?

A No sir.

Q Where does it go?

A It used to run into the San Antonio Water Company's pipeline in olden days.

Q Is there any water there now?

A I don't think so.

Q There hasn't been any water from it for a good many years?

A I think about 1900.

Q Have you any memorandum from which you can fix the date

when the purchase of the 130 inches of water was made?

A The copy of the deed and contract is in evidence in the other suit. My impression is that it was on April 12th, 1890. That is the way I recollect it.

Q That was to the San Antonio Water Company?

A Yes sir.

Q Do you know when that water was turned over to the San Antonio Water Company?

A I think in July.

Q 1890?

A Whatever year it was.

-o-

MR. WATERS: I have a few more deeds to offer. I offer in evidence a deed dated September 3rd, 1886, from the Cucamonga Fruit Land Company to T. F. Weaver and F. C. Nichols, conveying certain lands and water rights appurtenant to certain lands in Cucamonga described therein; recorded November 15th, 1902, in book 324 of deeds, page 41.

Deed from William H. Wending to Peter S. Weaver and Frederick C. Nichols, conveying certain lands and water rights described therein, dated April 22d, 1885, and recorded April 23d, 1885, in book 41 of deeds page 63.

Deed from Floyd A. Kilbourne of date 18th of July, 1901, to D. M. Kilbourne, conveying certain lands and water rights described therein, recorded July 25th, 1901, in book 307 of Deeds, page 109.

Deed from Gertrude D. Waddel and William Waddel to D. H. Kilbourne conveying certain lands and water rights described therein, dated November 22d, 1899, and recorded May 8th, 1901, in book 306 of deeds, page 214.

Deed from Charles H. Kilbourne to D. H. Kilbourne, dated the 27th day of January, 1901, conveying certain lands and water rights in Cucamonga described therein, recorded May 9th 1901 in book 309 of deeds, page 292.

Deed Sarah J. H. Clark to John F. Moore conveying certain lands and water rights in Cucamonga, dated 24th of June, 1902. Not recorded.

Deed from W. J. Kincaid to Samuel Cuming of date January 6, 1888, recorded January 19th, 1888, in book 62 of deeds, page 307, conveying certain lands and water rights in Cucamonga therein described. (Exhibit 67)

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GERVAISE PURCELL.

(Cross Examination resumed):

MR. CHAPMAN: Q The series of observations protrayed on this diagram on the board now---numbered 33---extends from January 21, 1904, to January 5, 1905, in one of its sections at least.

A That is my recollection.

Q Will you look on exhibit three and tell us what well of

the San Antonio Water Company or in which that company had any interest, was pumping on January 21, 1904? That is, if I remember rightly, the time when that diagram begins which you hold in your hand, plaintiff's exhibit three. Am I right about that?

A Yes sir.

Q Now what well of the San Antonio Water Company was pumping on that day and how many of them?

A On January 21, 1904, the observation was made by J. O. Marsh, and the information he gives here is that they were pumping.

Q What wells?

A He doesn't define which wells or how many.

Q Have you read the index of this map?

A Yes.

Q You understand what the various marks upon it signify?

A Yes. This ~~xxxxxxxx~~ "X" means pumping. This little "o" means not pumping.

Q Now the "X" means pumping?

A Yes sir.

Q Isn't that under well No. 14?

A I think it is simply put there for convenience.

Q It is there and indicates according to the index of this exhibit that on that day well No. 14 was pumping?

A If I didn't know to the contrary I might assume that. It don't so mean.

Q What do you think it did mean?

A That there wells 1, 2, 3, 4, and 5 were pumping.

Q There is no mark under either one of them that they were

pumping on January 21, 1904?

A You will see No. 14 is marked as pumping---

Q Was it or was it not?

A There is no mark except on the No. 14.

Q On January 21?

A Yes sir.

Q And on how many days does that "X" appear there indicating that that well was pumped?

A These observations were made by Mr. Marsh prior to the time that I came in onto this suit, and I don't know.

Q Hawn't you been giving an opinion as an expert founded upon what is represented on this exhibit three and eleven and is diagramed on these exhibits?

A Mr. Marsh testified to the accuracy of his own measurements.

Q And the index shows that where that "X" appears it means that the well was being pumped, doesn't it? and where the blank space is, where there is nothing written, it means that the well was not pumping?

A On this diagram three, beginning with January 21, when numbers 1, 2, 3, 4, 5, 6, 7 and 8 weirs are, there is no mark of any pumping at all on January 21. There is no marks.

Q And the Haskell well the same? There is no mark on it?

A No sir.

Q But on No. 14 there is a mark?

A Yes sir.

Q And that number continues day after day for what space of time?

A It terminates by this chart on the 17th day of February, 190[illegible], when they ceased pumping.

Q Where was the water that was being pumped from well No. 14 discharged? Into the tunnel?

A I don't know. I wasn't there. I presume it would be into the tunnel.

Q And at the beginning of your measurement there was how much of a sum total flowing out of that tunnel? Here is the total at the mouth of tunnel No. 2.

A 305.30.

Q And when that ceased to pump, - when they ceased to pump the water from well 14 into the tunnel, what then does it show was the sum total flowing out of that tunnel?

A That was January 5th, 1905, I think.

Q And was that when they ceased ~~xxxxxxxxxx~~ from some cause or other, from January 21, when they began to pump the water into the tunnel?

A Yes sir.

Q That increased the water of the tunnel?

A By just so much as they pump into it. It ought to.

Q And they continued till they ceased to pump?

A Yes sir.

Q When they ceased to pump what was the measurement of the sum total of the water from that tunnel?

A On the 16th of February, the sum total at that date was 3[illegible]3.7 inches.

Q And the next day after they ceased, which was the 17th?

A 298.

Q And on the 18th?

A 301.

Q Do you say now that when they began to pump the other wells the water of the tunnel continually went down?

A The diagram and the notes themselves will so show.

Q Now let us see if they will so show.

A Taking over the entire year, or whatever period is shown.

Q We will go back here to February 16th, which was when they quit. On the 17th it is shown that the sum total was 298, and on the 18th?

A 301.

Q On the 19th, 299 and on the 20th 294.60, and on the 22d 298.60, an increase of four inches, but there was no pumping being done at that time, was there?

A No pumping in that well No. 18.

Q There wasn't any pumping on any of these wells north? That is what I am calling your attention to.

A I think on the 18th there were two wells pumped north.

Q And then there was 301 inches, or an increase of about three inches over the day before?

A Those two wells were being pumped.

Q What wells if any were being pumped on the 19th?

A Seven and eight.

Q And on that day there were 299.30. What wells were being pumped on the 20th?

A 294---

Q What wells, I mean?

A The same wells.

Q Then there were 294.60. Now on the 22d, which is the

next day, what wells were being pumped?

A Seven and eight.

Q 297.90 inches. On the 25th?

A Haskell well No. 2 and eight.

Q And then there were 295.60?

A Yes sir.

Q On the 26th what wells were pumped?

A Haskell well No. 8.

Q And there were 296 inches total. On the 27th what wells were pumping?

A Seven and eight.

Q And there were 300.60 inches. How the 28th?

A On the 29th there wasn't any pumping.

Q And there were 299.70 inches. On the first day of March what wells were pumping?

A None.

Q And there was 302 inches. On the 2d of March how many?

A There wasn't any.

Q And there was 302 inches---

A Let me see now. Yes, that is right.

Q On the 3d of March?

A There was one well pumping and that was well No. 4.

Q And there are 299.80. On the 4th what wells were pumping?

A No well.

Q And there were 299.80. On the 5th what wells were pumping?

A No well.

Q And there were 300.20 inches. On the 7th what wells

were pumping?

A No well.

Q And there was 302 inches. On the 8th what wells were pumping?

A Not any.

Q And there was 300.60 inches. And on the 9th?

A None.

Q And there were 299.10 inches. And on the 10th?

A On the 10th no wells pumping.

Q 300.70 inches. And on the 11th, which is the next measurement?

A On the 11th no wells pumping.

Q And there were 29[illegible].40. On the 21st?

A There were no wells pumping.

Q 300.90 inches. On the 30th, which was the next measurement?

A No wells pumping.

Q And there were 301.50 inches?

A Yes sir.

Q Have you been all over this exhibit three and followed down the measurements as shown there and the information as to whether the wells were pumping or not?

A Yes, undoubtedly I have.

Q And do you not see that they did not correspond or respond in pumping of the wells above the base line?

A That is easily explained.

Q I am not talking about the explanation. But according to those entries.

A I think they do, when they are explained.

58Q What is your explanation?

A When they ceased pumping above Base Line, well No. 14 would discharge more water than when they were pumping, because the head was increased, and the accumulation of water in that reservoir could make a head and make a larger discharge in fourteen, there being sympathy betw en the two.

Q You gave your testimony as an expert that from that time on till they quit pumping the sum total was growing less.

A As a general proposition it is perfectly true, as shown on that exhibit.

Q On exhibit three?

A On exhibit 60.

Q Now do you find on this exhibit, the first place where you find a variation in 300 inches of more than three or four inches?

A Well, take April 2 and April 3. There is a difference of eight inches right there.

Q What does that say about the wells pumping?

A More than one of them were pumping. Well 2, well 3, well 4, well 5 and well 7---no, let me see. Yes, that is right---and well 8. Seven was not pumping.

Q Turn back to your explanation. How does your explanation explain it? You say when the pumps stopped running tunnel No. 2 discharged more water?

A That is what our data show.

Q Does it?

A Certainly. Here they continue to pump from that time on systematically.

Q I showed you that the sum total of these measurements here ran just about the same thing all the time, from 290 up to 302, and sometimes---

A That pumping was well 14 and discharges into tunnel No. 1, and naturally increases it.

Q The 16th of February is where they ceased to pump.

A That is right.

Q And these other pumps after that were on the other wells. Now, you say when they ceased to pump entirely, some one or two would discharge more water.

A When they ceased to pump well No. 14 discharged more water.

Q How about those wells in the north of Lake Line?

A Those are the wells I have alluded to as stopping the pumping.

Q And when they were pumping, this kept going down?

A Yes sir; this shows it.

Q And I say it don't.

A All right. The figures speak for themselves. They commenced systematically to pump the wells on July 15.

Q Why do you say systematically?

A Because the sheet so shows.

Q They commenced to pump before that?

A Sporadically. Some few were pumped occasionally, but there was no systematic pumping.

Q This exhibit says San Antonio Water Co. my pumping well five. San Antonio Water Company pumping wells 3, 4, 5 and Haskell well No. 2. San Antonio Water Company pumping all wells.

A That is July 15. That is what I was getting at. From that down it has a very marked decline and discharge.

MR. BRITT: You are going to the Hellman well?

MR. CHAPMAN: I am not but the witness is.

Q Look at this diagram which says they are pumping all the wells, and that continues till the next note on the map.

Q What do you want me to say?

Q I want you to say whether that exhibit shows a falling off in the tunnel systematically or responding to the pumping and not pumping.

A From July 15 to January 5---

Q But above that is the San Antonio Water Company pumping Haskell well No. 2?

A Yes.

Q And you say that continues until the next date, and that is that date---March 20, and that would continue according to the note on your diagram to July 11?

MR. BRITT: Let me again call your attention to the circumstance that you are referring to a diagram which purports to show the rise and fall of water in Hellman Well No. 2, whereas in the witness's examination where a parallel is drawn with this diagram before us with exhibit No. 3 and exhibit No. 60, or water issuing from the tunnel; and I think the continuity of the witness's story is shown on exhibit 3 and on exhibit No. 60. Both of them purport to show the history of the water discharge from the Eady tunnel.

MR. CHAPMAN: I say this diagram shows the dates in which he says, or the diagram says, a certain condition of things existed, and that it continues till the next note.

MR. BRITT: I don't know whether the diagram says that or not, but I think it would contribute somewhat to the fairness of the narrative, if the witness continues to talk about exhibit three, or rather the water from the tunnel, rather than to switch over to the flow of water in Hellman well No. 2.

MR. CHAPMAN:

Don't you remember when Mr. Wright was on the stand and this diagram was introduced, that he explained what these marks on the diagram signified? I wasn't talking to the witness about the ffect on the Hellman well, or well No. 2, or the Artesian well; but the diagram which is supposed to have been made up from exhibit three shows what wells were pumping and from what day to what day.

MR. BRITT: The primary evidence is exhibit three.

MR. CHAPMAN: I know it is; and I called his attention to the diagram that he has set up here. It does not correspond with exhibit three.

MR. BRITT: That is a different proposition. If you can show that I have no objection. I thought you were pursuing a history of the discharge of the water from the tunnel.

MR. CHAPMAN: I am. Let me call your attention to the diagram exhibit 38 again, and what it says: "San Antonio Water Company pumping Haskell Well No. 2." That is on the date of March 20th, 1904. The next indication on this map is "San Antonio Water Company pumping well No. 5," which is dated July 12. Here in the center is a line drawn "Top of iron casing of well," and across that line are several. So according to this diagram and the explanation by Mr. Wright the Haskell well was pumped continuously between those

dates. Now I call your attention to exhibit No. 3, from which this exhibit 36 was compiled, and to the fact that that well was not pumped continuously between those dates.

A: I didn't say that exhibit 36 so states specifically.

Q And I didn't say that it did. I said that Mr. Wright said it.

A Mr. Wright is the best evidence on that point and I must decline to add anything to that.

Q Didn't you tell us in your examination that you helped construct diagram 36?

A From the time I came into the suit.

Q When was that?

A July 15, 1904.

Q And you were testifying and giving your opinion as an expert that the pumping of these wells north of Base Line affected both the tunnel and the waters on the east side. You were not testifying from this exhibit three, were you?

A Certainly I was. That has all been sworn to by Mr. March. He was here on the stand and testified that as far as his portion was concerned it is accurate.

Q Did you know what he testified?

A I was here when he testified .

Q Did you know what Mr. Wright testified?

A I was here when he testified.

Q Do you remember his explanation of this exhibit 3?

A Yes, I remember his explanation.

Q I call your attention again to the fact that according to exhibit three the Haskell well was not pumped during the time represented here. Mr. Wright said when there was a

mark across here saying that a condition of things existed, it continued till another note was made, and that that was true with the exception of one place where for a long space of time it said they were pumping and that he knew they were not pumping all the time. That was not this space.

MR. HASKELL: The testimony was that in a certain space of time some of the time there wasn't any pumping. He didn't say all the time. He said some of the time the pump was broken down.

A If I had Mr. Wright's testimony before me to refresh my memory---

Q For once in my life I am telling the truth when I say he did say that after a note on this sheet the condition existed till a new note was made.

A Then if it is as stated that, there is apparently a mistake, and there is an error, because they stopped pumping the Haskell well No. 2, according to this exhibit three, on the 27th of February, 1904. The Haskell well No. 2, known as well No. 8.

Q Let me ask you for your information of exhibit 38, what do you say these notes mark?

A They mark the rise and fall of the water in Artesian well No. 2 and Hallman well No. 2.

Q But here in the center is a line drawn, "Top of iron casing of well," and across that line there are several different groups, for instance, "San Antonio Water Company not pumping." How do you understand that this is the information that we are given from this point where the San Antonio Water Company is not pumping, and which is about

January 9th, 1905, to August 16th of the same year?

A Well, if Brother Wright had said "ceased pumping" it would have conveyed the fact a little clearer and it continued then till they commenced pumping.

Q You had come into the case when this note here was made of January 7th or 8th, 1905, and you helped to construct this diagram from that time on?

A I helped to acquire the data.

Q But you didn't help construct the diagram?

A It was platted by Mr. Wright's assistants in his office and we checked it out from the notes.

Q Do you know these notes mean?

A Yes sir.

Q What do they mean?

A That they ceased pumping at this date given here, which is January 10th, and that they commenced pumping again certain wells---No. 8---"San Antonio Company pumping well No. 8" on August 15, 1905, and then that was all apparently; that they pumped until August 23d of the same year, and then they pumped one, six and eight, and the next day they pumped one and two, and the next day after one, two and three, and apparently kept that up until the 13th or 14th of September, and they pumped one, two, three, six and eight, and continued that on one, two, three, six and eight.

Q For how long?

A Until the 6th of November, 1905. Exhibit No. 3 will show it more definitely or in detail.

Q Here is exhibit No. 3. September 13th they didn't pump wells three, four and five, did they?

A They are not recorded on this.

wells? When did they in September first pump either of these

A Here. On the 23d they were pumping.

Q What wells?

A Wells number one, two, three, four and eight.

Q For one day? Isn't that so? That was on the 23d?

A I don't think it is so. They were pumping on the 23d.

Q Then when next did they pump?

A They may have pumped after that---

Q When next does this exhibit show that they pumped?

A On the 30th there was one, two, three, four and eight.

Q For how long? That was for one day?

A One day is recorded here.

MR. SMITH: Q Does that say one day?

A No, it does not. It simply says on this day they were pumping, but it does not say they were not pumping after that.

Q "Blank, no observation."

A That does not mean there wasn't any pumping.

Q How do you know there was pumping or not if there was no observation? "o" as to weirs means no water and as to wells means not being pumped. The 'X' means being pumped, but no measurement taken." That sheet, as it is described here, blank means no observation taken. At none of these dates marked on this diagram here, from September 12 to September 20th on that diagram is left as though no observation had been taken.

A No sir. Above this on April 18th there is a statement made that the wells were being pumped but the weirs were

being pumped, and it was impossible to make an observation. And that may have been the case and probably was on many other days.

Q Was it the case?

A That they were locked?

Q Do you know that that is the explanation?

A I know that many times they were locked.

Q Do you know that that will explain the gaps in this chart No. 3?

A If I had Mr. Reid's original notes which were put in here when he was here on the stand, I could answer that better. If I had his written notes I could show you exactly what he says.

Q But you haven't gotthem.

A I have got them, but they are in Los Angeles.

Q But you haven't got them here. On January 5th, 1905, you say the pumps did cease?

A January 5th, 1905, two, three, four and eight were pumping.

Q On January 8th they ceased then, wasn't it?

A The 7th---no, they were pumping on the 7th and the next date came to the 10th. I presume they ceased.

Q Didn't you testify in your direct examination that they did cease and that they didn't commence again till what date?

A On July 16th or 19th, well No. 8, is the first time they began to pump between these two dates. That is the first observation we had.

Q Didn't you testify in your direct examination that they did cease on January 5th, 1905, and that then the water began to rise again on this diagram?

A That is correct, as far as I know. Q Then this exhibit No. 3 shows between these two dates the same blank space with no notes at all that it does in the places to which I called your attention before? There is no difference in the notation at all, is there?

A No.

Q What is the distance from the Haskell well and these others, one, two, three, four and five, to well 14?

A I think it was testified here to be about 1500 feet.

Q What do you say? A (Scaling on map) Well No. 14 to well No. 3 is 18 inches. That would be 2400 feet.

Q How far is it to the Haskell well from well No. 14?

A About fourteen inches, about a mile.

Q How far are those wells, the Haskell well and the well No. 3 that you have just measured from Artesian well No. 2?

A From well No. 3 to Artesian well No. 2, 2700 feet.

Q And how far from the Haskell well?

A 3600.

Q How far is the Haskell well from the Cucamonga Springs at the place that you have in your mind?

A Somewhere in the neighborhood of a mile.

Q Did you measure about the Haskell well?

A Yes sir.

Q How far from the Lone Star wells and tunnel to the Cucamonga Springs?

A About 4800 feet; about the same distance.

Q How far is it to the other well on the Lone Star tunnel?

A 4500.

Q How far from the Cucamonga Springs to the wells on the

35-acre tract, that is No. 7 and 8 I believe?

A You want from the Cucamonga Springs?

Q To the 35-acre tract wells.

A 4200 feet.

Q Are those wells all close together, five of them?

A That is what Mr. Stowell testified.

Q Are they all close together?

A They are all within 200 feet. Those are the wells on the 35-acre tract.

Q How far is it from the Cucamonga Springs to well No. 14?

MR. WHITE: Q What are you measuring from as the Springs?

A I am measuring from the box at Mountain View hotel.

MR. CHAPMAN: Q Where is the point of diversion from the Cucamonga Creek?

MR. WHITE: Do you want the 36-inch pipeline?

MR. CHAPMAN: Where the Cucamonga Springs at the pipeline start.

A Right here it is. There is a difference of over 900 feet in the northeasterly direction, in the direct direction, which would make a difference in those measurements of 600 feet.

Q Which ones?

A The ones I have recently given; is the different wells in the 35-acre tract.

Q But it would have no effect on the measurements of well No. 14 or Artesian well No. 7?

A No.

MR. WHITE: Q Did you measure all from the same point?

A Yes sir.

MR. CHAPMAN: You are mistaken.

A I understood Judge Britt, if I made the measurement of the Springs from the same point.

MR. STEVENS: You measured those on the west side the same as the east side?

MR. CHAPMAN: He measured from well 14 on the east side and from Artesian well No. 2 on the west side.

Q What is the distance from the Cucamonga Springs to Artesian well No. 2?

A About 3700 feet, between that and 3900 feet.

Q What is the comparative elevation between Artesian well No. 2 and Cucamonga Springs?

A Just above the Springs there is no contuor exactly--- the contour that touches the Springs is 1250 and the contour that touches Artesian well No. 2 is 1410.

Q And the one that touches well 14 is what?

A 1410.

Q Now the depth to where the tunnel cuts that is some where about 100 feet, isn't it?

A Yes. Artesian well No. 2 is at the bottom of a shaft which is 64 feet deep.

Q Below the surface?

A Yes sir.

Q Is that to be added to the elevation that you gave?

A No. That elevation that I gave you ought to be the elevation of the surface, and the well No. 14 is the elevation at the surface and not where it is cut off in the tunnel.

Q You say Artesian well No. 2 has a shaft there of what depth?

A My recollection is 4 feet.

Q Does the water overflow there?

A No sir.

Q How far is the water from the bottom of the shaft?

A It is according to the pumping done by the wells above.

Q I am speaking of the normal level of it.

A I don't recollect.

Q Before the shaft was put down there it was standing near the surface?

A That was before my time. I don't recall as a fact.

Q What observations have you made in that section of the country from which you ascertained the trend of the under ground water?

A The developments in a measure indicate the trend of the underground water. Also the surface channel would in a measure indicate.

Q Is there more than one surface channel in that section of the country?

A Oh yes, there is a number; some small and some large.

Q Where are the principal ones?

A The principal channel is Cucamonga Creek, and that keeps together in one channel for some distance down in a southeasterly direction, some little distance above the Red Hill it breaks into several channels.

Q On the surface?

A On the surface; a number of them coming---in fact the majority of the channels seem to go towards the south-east.

Q And some of them towards what?

A And I think some of them towards the southeast.

Q Do any of them come from the westward of the Red Hill?

A Well, the whole country there, there is decidedly a trend of some of them west of the Red Hill.

Q Did you ever know that country when there was a living stream flowing from the Cucamonga Canyon to the west of the Red Hill?

A I did.

Q How long ago was that?

A That I don't remember. I can't say positively on that matter.

Q From your observation have you formed any opinion as to where the water divides and flows part to the east and part to the west?

A Somewhere north of Base Line.

Q And whereabouts on the Base Line or north of the Base Line?

A That is pretty hard to indicate exactly. It is probably not further than the first mile north, and perhaps less.

Q How far is it from the northern boundary of the Cucamonga ranch to the canyon?

A I am not familiar with the boundaries of the Cucamonga rancho.

Q About how far from these northern wells is the mouth of the Cucamonga canyon? I am speaking of this line of wells that have been spoken of here as wells number 1, 2, 3, 4 and 5.

A I think that the government topographical map shows it about three miles in a direct line. Of course, the crookedness of the creek might make it more.

Q If the top of the map were moved far enough north to include the Cucamonga canyon, about where would that enter the top of this map or a stream of water flowing from it?

MR. BRITT: I don't get the drift of this question. I would like to know what it means, "if this map were moved far enough north to include" and so forth.

Q I mean if the map itself were extended far enough north to include the canyon within its limits, about where would it enter?

A It would be altogether guess work. I prefer to have the map.

Q Don't you know the direction of the mouth of the canyon from the Haskell well?

A Some-what northwesterly, according to my recollection.

Q From the Haskell well?

A Yes sir.

Q Do you recognize this blue line between the sloughs, and which have been described as marking the course of the flow of Cucamonga Creek?

A I recognize that line.

Q Did you ever see the water flowing along that line?

A I saw the water flowing, yes.

Q Does that approximately show the flow of the creek through this map here?

A Evidently.

Q Following that wash which way do you go and what is the direction to the mouth of Cucamonga canyon?

A Northwesterly.

Q Your recollection is that the mouth of the Cucamonga

canyon is to the northwest?

A Northwest of the Haskell well.

Q And about how far distant?

A North of the line of this map to the mouth of the Cucamonga canyon, somewhere between three and four miles. Perhaps a little more or a little less.

Q About where do you say is the line where there is a division of the water?

A When you get to the Red Hills---you mean the division of the waters of Cucamonga Creek exclusively?

Q No. Of the percolating or underground water coming from the mountain range.

A At the apex of the Red Hill.

Q What do you indicate on that map as the apex of the Red Hill?

A Here is the axis of it running from Lot 6, marked Eady, and running up close to Section 4, and continuing to out 500 feet east of well No. 5. That is pretty near the axis. And the apex of the Red Hill, where it seems to distinguish from the general plain, is somewhere this side of---probably 600 feet southerly from well No. 5.

Q After their division it is your opinion that the underground waters flow part of them in a westerly and southwesterly direction and the other in an easterly and southeasterly direction?

A That is my opinion. And it may be that there is an intercommunication between the east channel and west channel, as far as the underground flow is concerned. Their elevation is the same and the indications are from exhibit eleven

that since the developments on the east side have occurred, there has been a dearth of water on the east.

Q What shall we understand you to mean? That there is a bare possibility that there may be an underground communication between them, or that it is your opinion that there is such a one?

A There is nothing in the nature of the soil to prohibit the supposition that there may be a percolation from east to west. There is a decided connection between the country northeasterly of the east channel and northwesterly of the east channel, and where they meet together and go into a common underground reservoir.

Q I ask you if you mean we shall understand that it is your opinion that there is such communication or that in your opinion such a thing may be possible?

A I can't answer any other way, and I don't assert it.

Q And you ~~xxxxx~~ assert that it is your opinion that such a thing may be, and that is as far as you go?

A That is as far as I dare go with the information that I have.

Q I want you to repeat what you have to say about the communication between the underground waters above this point where they diverge, one flowing to the east and the other to the west.

A The underground water in the plain north of the Red Hill is an accumulating reservoir of the underground water. There is a change of grade above the Base Line where it becomes less acute, and therefore the water accumulates there as it always does. It is then distributed to the easterly

side and, apparently from exhibit 11, a majority of it was so diverted, and some of it went to the westerly side, and it seems now that the larger portion went west and the smaller portion went east.

Q The grade of which you speak, which had decreased, does it continue to decrease as you go south?

A It continues as a flat grade, compared to the northerly grade.

Q And that is the grade from the Cucamonga Springs up to the Haskell well?

A Pretty near 300 feet to the mile.

Q And what is the grade from the Artesian well No. 2 to a point due west from the Haskell well?

A There is 130 feet difference in the elevations.

MR. SMITH: I understood the question to be to a point due west of the Haskell well.

A How much due west?

Q You measured here the grade from the Haskell well down to the Cucamonga Springs. What is the grade from a point of the same elevation from the Haskell well west down to Artesian well No. 2?

A The Rose Hill intervenes and there would be two grades. There would be a grade---there would be at least three difference grades.

Q There wouldn't be three grades from Artesian well No. 2 to a point north on the same elevation with the Haskell well, would there?

A Well No. 4, you get a grade between them---

Q I am not asking for the grade between them.

What is the grade of the country between Artesian well No. 2 northward?

A About 120 or 30 feet.

Q To the mile?

A Let me see. Don't put that down yet.

MR. [illegible]: Q Is there anything to show the gradient north in the Dam Level?

A Nothing on the elevation of the well. We have an exhibit here that shows that.

MR. [illegible]: Q What is the elevation of the well?

A The mill of the well is marked 1,[illegible]--well No. 4.

Q And what is Artesian well No. 2?

A 1,110.

Q Making a difference of 70 feet?

A Yes sir.

Q In what distance?

A In 2700 feet.

Q Can you tell us from the markers there on that exhibit one or that topographical map, in what direction the waters on the eastern side would flow if left to themselves?

A They would flow northerly on the eastern side.

Q Of the Red Hill?

A Of the Red Hill.

Q You have stated in regards that this well No. 4, the flowing well was, when first bored, an artesian well.

A I understood that it would flow over the surface.

Q Ten feet over the surface. We put a pipe ten feet over the surface?

A Yes.

Q At that time it was not connected with tunnel No. 2?

A No sir.

Q When the water in that well was ten feet above the surface of the ground at well No. 4, how many feet higher did it stand than the surface water at Cucamonga Springs in elevation?

MR. BRITT: May I inquire at what point in the Cucamonga Springs? The Springs reach from near the Base Line down for half a mile or more.

MR. CHAPMAN: Where they come out of the ground; where the waters were diverted here.

MR. BRITT: The Cucamonga Springs, the evidence shows, include the sienegas and that creek, and wherever the water rose on the surface.

MR. CHAPMAN: That is so. But the witness knows we have had under consideration a point about which for the last ten or fifteen or twenty years there was water flowing from the Cucamonga Springs on the surface of the ground.

MR. BRITT: And that was a point at the extreme lower end

MR. CHAPMAN: That is exactly what I want. I want the difference in the elevation of water in that Artesian well No. 4 when it stood ten feet above the surface of the ground, as compared with a point in the Cucamonga wash as the Cucamonga waters come to the surface at any time on earth.

MR. BRITT: That is a distance a half a mile up and down the Cucamonga wash where the water came to the surface. It was taken out at the head of the 30-inch pipeline, which would be about the lowest point where the water appeared.

MR. WASKELL: And the evidence shows that the point where

the water rose varied at different times and at different periods.

MR. CHAPMAN: I would like to have the witness answer my question, regardless of whether counsel is satisfied with it or not.

MR. BRITT: We want to know what the question means?

MR. CHAPMAN: That is exactly what it means. You know there is a point where the water has continued to rise even after the Y tunnel was made, and issued on the surface of the ground.

Q If you can locate that within a hundred yards I want you to tell me the difference in elevation of that point from the waters or Artesian well No. 2 when it stood ten feet above the surface of the ground.

A On plaintiff's exhibit No. 1 under the head of the 30-inch pipe line, the contour at that point is 1250. The contour at well No. 4 is 1400 feet

Q Then there was a difference in elevation between these two points of 150 feet?

A There is a discrepancy here---

Q Answer one question at a time.

A I want to finish the other answer. Here at well No. 4 there is---No, that is the date and here is the elevation. That is correct.

Q Then the difference in elevation is 150 feet?

A Yes sir; 150 feet; being in favor of the 30-inch pipe line and Cucamonga Spring.

Q What do you mean by being in favor? That depends on one's taste.

A I mean that it is lower.

Q That is that the tendency would be to flow from Artesian well No. 2 to the Cucamonga Springs at that point?

A Yes sir.

Q Half a mile above that point what is the elevation?

A In what direction?

Q Along the line of the ridge.

A Along the line of the channel, 1400 feet.

Q That would make the waters standing at Artesian well No. 2 ten feet above the ground ten feet higher than that point which you measured last. Will you make some mark by which we can know where that point was?

A 1300 feet almost due south of the San Bernardino Base Line, from the center of the east wash as delineated on plaintiff's exhibit one.

Q And the inclination of the surface of the ground is to the southeasterly?

A The inclination of the channel is southeasterly---the surface channel.

Q And 150 feet to the mile?

A In half a mile there is a difference in elevation in that channel in a southeasterly direction of between 1320 feet at its lowest point and 1410 feet at its highest.

Q That would be 90 feet?

A 180 feet to the mile.

Q The inclination or grade on the western side from that well No. 4 I believe you stated was about 130 feet to the mile to the south?

A I did n't say anything about the grade. I said that the

trend of the water was southerly.

Q And didn't you give me the grade on that side after some considerable talk between us as to the grade of the land, according to the inclination, whichever way the grade is?

A 160 feet to the mile in a southerly direction passing through No. 4.

Q Did you take the grade as it cuts the contours?

A Yes sir; I took the contour elevations. There is XXX 1360 and 1440, about eight inches apart, 300 feet to the inch, which would be 2400 feet, or nearly half a mile.

Q How much is this one here?

A 1360.

Q And from there to the 1440, what is the distance?

A About nine inches, 2700 feet, or a little over half a mile.

Q And the difference is what?

A Eighty feet.

Q And there the inclination is almost south isn't it?

A Almost south. That is a higher place than where well No. 4 is, and they are not exactly in the channel, so the grade would be a little less.

Q That would it be from the well?

A To where?

Q Going south that would be the inclination?

A I have already answered that. I think we made it 160 feet passing through the well north and south.

Q Did you hear the testimony of Mr. Stewell that at one time that one of his wells on the west side was cut into the tunnel, that another well nearby the water stood in it

eighty feet---

A Difference of elevation?

Q Yes.

A I heard him make that statement.

Q And they were not very far apart?

A Not very far apart.

Q If that were true could there have been any communication or influence exerted between the waters which supplied one of those wells and the other water supplying the other?

A I didn't have an opportunity to examine those wells. I heard Mr. Stowell testify in the other case and in this. But as I was not on the ground and didn't see the wells and he didn't describe anything about the local conditions, either by the boring of the wells or anything else on either occasion very minutely, I have not arrived at any defined opinion on it.

Q Could there be any such thing anywhere as two tubes inserted in water that communicated one with the other, where the water could stand eighty feet higher in one than in the other?

A Yes sir; if the water source from which they came were two different sources.

Q If they came from two different sources and there was an impermeable barrier between the two there wouldn't be any direct mode of communication between the two?

A No.

Q When the water stood 110 feet in this well No. 4, could it possibly have been maintained in that position for any considerable length of time with that tunnel near to it if the two were drawing on the same source or if there was a

communication between the two? I will put it a little different. If there was a free communication between the two?

A I would say that it would not. I would say that if it stood so much higher than the floor of the tunnel it would come from a different strata. The evidence shows that the well was bored to great depth below the bottom of the tunnel. If I remember right it is 480 feet deep.

Q The evidence also shows that a short time after the well was bored Mr. Stowell cut it ten feet below the surface of the ground, and that it would then stand 90 feet above the floor of the tunnel. Now, in the course of time is it not your opinion that that tunnel would have taken the water from that well if there was a communication between the two?

A The tunnel wouldn't have taken the water from the wells, but I think the wells would have taken the water from the tunnel; because the tunnel drews on the upper portion of the saturated mass and the well evidently drew on the lower portion and by so doing it lowered the saturated plane above that of both of them directly, and in that way it would diminish the flow.

Q In that case you would have to pump the well?

A If the well was not flowing itself you would have to.

Q How do you say that in your opinion the pumping of water north of this base line tends to diminish the water in that tunnel?

A It reduced the elevation of the saturated mass and thereby reduces the head and the pressure behind and the feed to the outlet is diminished.

Q Do you know how deep these wells to the north are?

A I think Mr. Trask testified to that here. I don't recollect exactly their depth. But it is in evidence here.

Q Do you know approximately what the depth was?

A I do not recollect that there was any direct testimony showing the depth of the wells, except the depth to water.

Q Did you make any inquiries when you were making these investigations except to form an opinion as an expert of the probable effect of these wells of one section of the country on another?

A I made a good deal of an investigation of the conditions in this particular section of the country that would make one well affect another, and my recollection is that I have never been able to ascertain just how deep these wells at the north of Base Line are, though I may be somewhat in error on that point. I remember asking for that information a good many times.

Q This tunnel No. 2 is at a place where the surface of the ground is at a much less elevation than these wells, is it not?

A The surface floor of the tunnel?

Q No. The surface of the ground where the tunnel is constructed is lower than the place above Base Line where the wells are bored?

A Yes sir.

Q And the tunnel cuts it a hundred feet under the surface?

A Yes sir.

Q Then why wouldn't the tunnel draw the water from the wells instead of the wells drawing the water from the tunnel?

A As I explained before the tunnel is in the upper portion of the saturated mass and the wells go deeper and draw from a deeper source with a bigger head and a larger discharge. I am taking now well 4 and well 14.

Q No. 4 and No. 14 both extend far below the floor of that tunnel, don't they? A Yes sir.

Q And they are drawing water from a deeper source than the level of the tunnel?

A No doubt about that.

Q Why should the affection be found in favor of those wells above, rather than in favor of the tunnel and the wells below?

A They both do the same damage. There is no question about it in my mind and never has been. Well No. 4 and 14 are damaging the free flow that was originally there before they were bored, the same as the pumping of the wells above Base Line.

Q Prior to January 1907 there was no bulkhead in that tunnel was there?

A So I am informed.

Q And the waters flowed from that tunnel into the water that came up in the tunnel continually, whether the wells were being pumped or not. Did you observe or take any pains to ascertain when these wells were not being pumped and the water in that tunnel was flowing freely out, that the wells north of Base Line were affected at all?

A It was not possible to do so, because I didn't have the power, authority or apparatus to shut up the wells below to see the effect on the wells above, or in any way interfere

with the arrangements of the San Antonio Water Company, or whatever company was operating the different wells, and I had to take my observations from the circumstances surrounding.

Q If I am not mistaken, your exhibit three shows that a very considerable part of the time the wells above Base Line were not being operated?

A There were times when they were not operating.

Q And for many days together?

A Yes sir.

Q Did you attempt to make any such observations then for the purpose of ascertaining?

A Yes sir, certainly. We kept tab on the elevation of the water in Artesian well No. 2 which followed up and down with the pumping or not pumping of the waters.

Q And that is exhibited on diagram 3H?

A Yes sir.

Q The Hellman well No. 2 you also kept tab on?

A Yes sir.

Q How do you account for the fact that the Hellman well was affected so much more seriously than Artesian well No. 2?

A I account for it in two ways. In the first place I understand that Artesian well No. 2 is 200 feet deep, and the Hellman well No. 2 about 500 feet deep. The difference in depth would make some difference. Also, the continuous flow of No. 4 and 14 and other wells in the Eady tunnel coming off of the 90-acre tract, would tend to make the pulsation in Artesian well No. 2 a little more pronounced than in the Hellman well.

Q How far is the Artesian well from the tunnel and from well No. 4 and well No. 14?

A 600 and 900 feet respectively.

Q How far is the Hellman well No. 2 from those wells?

A Hellman well No. 2 is distant 4350 feet from well No. 14. Hellman well No. 2 is distant 4200 feet from well No. 4.

Q The Red Hill intervenes between the Hellman well and wells No. 4 and 14?

A The Red Hill intervenes.

Q During your observation in 1904 and 5 did you keep tab on the Lone Star wells and tunnel?

A Yes sir. I would wish in that connection to state that when you asked me this morning if we had done so, that I so instructed Mr. Reid, and that they show on exhibit 3. I thought they didn't, for the reason that I always called that by the weir number, which is No. 5, and not by the local name of Lone Star, and it is the No. 5 and it was measured with equal persistency and an equal number of times, generally speaking, as the others; and I measured it myself when I was there.

Q Are those measurements inscribed on exhibit three?

A They are inscribed on exhibit three.

Q Did you keep any observations or make any during that time on what was known as the Old Settlers' well?

A No that is north of the Base Line and east of the Haskell well.

Q I think you are mistaken about the location.

A I know we measured everything in sight that we could get at. We never went east of Hellman avenue as delineated

on this map.

Q How far are the Lone Star wells from the Hellman well No. 2?

A Between 1700 and 1800 feet.

Q And in what direction?

A Northeasterly.

Q And the Hellman well No. 2 is northeasterly?

A No. The Lone Star is northeasterly of the Hellman well No. 2.

Q To which one of the Lone Star wells did you refer?

A Well No. 6.

Q And whereabouts located?

A In Lot 11.

Q How far from the Hellman well to the Lone Star well?

A 1950 feet. Between 1900 and 2000.

Q I notice a well marked "East Hellman well." Did you make any observation of that well during 1904 and 5 in this case?

A That well is wrecked and observations were impossible. The shaft is broken.

Q Was it wrecked during all that time?

A Yes sir; and I think it is probably wrecked to-day.

Q What is the distance from the Lone Star wells to the wells on the 30-acre tract?

A Well No. 6 of the Lone Star is distant from well E on the 30-acre tract between ten and eleven hundred feet, and between fifteen and sixteen hundred feet from well E on the 30-acre tract to well 6 of the Lone Star tract.

Q And how far from the wells on the 30-acre tract to the

Hellman well?

A Which well? Well E?

Q Both of them.

A Well E on the 35-acre tract is distant 2400 feet from Hellman well No. 2. Well 6 on the 35-acre tract is distant from the Hellman well No. 2 between 35 and 36 hundred feet. Well I on the 35-acre tract is distant from Hellman well No. 2 between 3000 and 3100 feet. Well H on the 35-acre tract is distant from Hellman well No. 2 between 2900 and 3000 feet. These are all the wells on the 35-acre tract.

Q I believe you say that you made observations and tabulated those observations on exhibit three of those wells in the 35-acre tract?

A No. We made no measurements of the wells on the 35-acre tract, either directly or by our assistants.

Q Did you make any measurements of the amount of water flowing from those wells on the 35-acre tract?

A No sir.

Q Didn't you make any measurements at all?

A I made no measurements at all for the reason that there is a divide between them and Hellman well No. 2.

Q What kind of a divide?

A I presume that is the reason. I don't want to make that as a positive statement.

Q There is a divide between Hellman well No. 2 and 4 and 14, isn't there?

A I am not sure. I find that we made some measurements on weir 6 tabulated on plaintiff's exhibit 3 and that that well was---

Q Did you make any measurements at weir 7?

A Weir six and weir seven both.

Q What water did the weir six measure?

A Weir six measured the 3½-acre wells when pumped.

Q And what would weir seven measure?

A When they were not pumped, when it was flowing by gravity.

Q Is that the same weir that Stovall referred to as the south side box?

A That I don't know.

Q You heard his testimony on that subject did you not?

A I heard all his testimony, but I don't really remember that especial point about it, about the north side box.

Q Do you know of a measuring point by that name?

A Unless it is the Old Settlers' sand box, which would be on the east side.

Q Of what?

A Of Hellman avenue and south of Base Line.

Q Is that the same place that you referred to as weir No. 7?

A Marked weir No. 7 here.

Q How far is weir No. 6 from weir No. 7?

A About 14 or 15 hundred feet.

Q I believe you expressed the opinion that the pumping of these wells north of Base Line affected both the water in the tunnel No. 2 and wells No. 4 and 14, and also the wells on the east side of Hellman avenue, No. 2 for instance. Now in what manner is it that you say in your opinion that that influence was exerted?

A By withdrawing the water from the underground reservoir and reducing the pressure and lowering the hydraulic head.

99Q Is it your opinion that not all of those sienegas, streams and wells are supplied by the mountain water shed from the Cucamonga range?

A I don't see any reason why they should not. It is my opinion that they are.

Q Do you see any reason why they should be?

A It is quite a productive water shed and a good steep water shed, and would deliver a considerable run-off.

Q You probably misunderstood my question. Do you see any reason to believe why the wells or streams or sienegas should be or are supplied from any other source than the Cucamonga water shed?

A I see no reason, but I wouldn't want to be understood as saying that there might not be an underflow from some point further east or further west. I have taken into account the water shed of Cucamonga Creek as far east as Deer Creek.

Q But while you don't undertake to say that it is not possible that there might be some accession from some other water, you have no reason to believe that it is the case?

A No. I have heard of a tradition, but I don't know how much there is in it, that would indicate that there was some water coming from some other source.

Q If those waters are all moving in contact, why will not any subtraction from it by any means, by any of those wells, have the same effect that you speak of in lowering the water?

A Proportionately they will.

Q The wells north of Base Line, you don't imagine,

affect the country in any other way or reason than the subtraction of so much water from the water plane or the saturated mass?

A I don't see how they can affect it any other way. I would want to know how you mean; in what other way?

Q As I understood your answer, I think it implied that whoever bored a hole into that saturated mass and pumped, or if it was artesian, if it flowed, there would be that much subtracted from the general mass, and to that extent would lower the water.

A North of Base Line?

Q Anywhere.

A That is true.

Q It would make no difference whether it was north or south of Base Line would it?

A No, I don't believe it would. The effect would be felt.

Q As a matter of fact, does the pumping of any well have that effect upon the whole surrounding country?

A As a matter of fact the pumping of those wells has that effect on the south and north country.

Q You say you don't know where the Old Settlers' well is?

A No. I failed to locate it on exhibit one.

Q You think the pumping below the Lone Star well and the Hellman well No. 2 and the wells on the 30-acre tract do have a tendency to lower the amount of water in the saturated plane?

A The Hellman well is not pumped.

Q Is it Artesian?

A There is no flow to it except a very slight amount now. But during our observations it was below the lip of the well.

There is a shaft 43 feet deep and then there is a driven well. Now the water was below the lip of that driven well and did n't supply any.

Q Didn't supply any?

A Didn't supply any overflow or pump flow during the time I had cognizance of it.

Q Any use made of it at all?

A No sir, because it does not raise out of the well. Just at the last time I visited it there was a fraction of an inch over the top of the lip, and the amount of water that was flowing into the tunnel was so small that I supposed it wouldn't flow many feet before it would disappear.

MR. SMITH: Q When was that?

A Sometime in December of this year---1907.

Q And exhibit No. 11 will show that?

A There it raised over .2. That is the only occasion that I ever saw any water coming out of that well. That is so small that it might be negligible.

Q Where did the water from the Kellogan well flow if it ever did flow?

A Into the shaft and into the Y tunnel on the west side.

Q And did it have a tendency to lower the water plane?

A Yes; it would lower the plane if it flowed out any amount.

Q In your theory what effect would the putting of a bulkhead have on the water plane and the surrounding wells?

A I am informed that tunnel No. 2 is a 30-inch pipe line inside of a tunnel with shafts coming out of it. The bulkhead has a tendency to stop the water from the various wells

that originally flowed from the tunnel, and in that respect it accumulates that water in the pipeline.

Q The object of the bulkhead is to shut off the water entirely or partially, according to the needs of the owners of the water, and it might shut off the water above that bulkhead entirely?

A Which water?

Q The water in the tunnel above the bulkhead .

A It would be shut off by the bulkhead to the extent of the elevation to which it was kept.

Q To the extent of what?

A To the extent of the elevation at which that water was raised by the bulkhead.

Q The bulkhead is constructed at the division line between the 90-acre tract and the lands outside of it?

A I don't know. I have been so informed though.

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Here the court takes a recess until to-morrow, January 25th, 1906, at ten o'clock in the forenoon.